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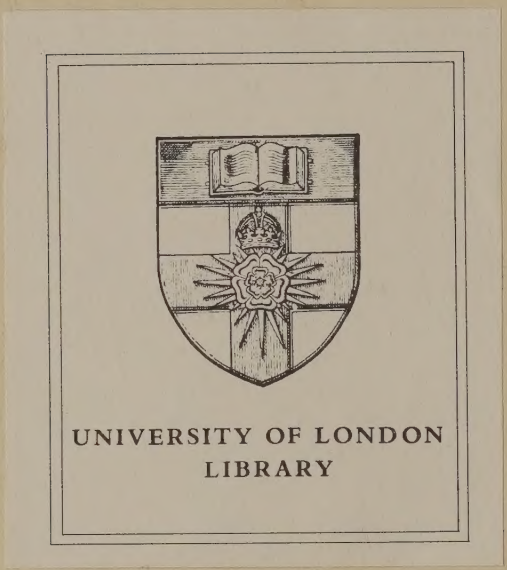
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EAST INDIA—*continued.*

## PROGRESS AND CONDITION.

Session

12 *March* 1894 — 25 *August* 1894.

VOL. LIX.

1894.

BIBL. LONDIN. UNIV.

# ACCOUNTS AND PAPERS:

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*FORTY-SEVEN VOLUMES:—CONTENTS OF THE*

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EAST INDIA—*continued.*

Progress and Condition:

43. Statement exhibiting the Moral and Material Progress and Condition of India during the Year 1891–92, and the Nine preceding years. Twenty-eighth Number (the Third Decennial Report). p. 1

199. Statement exhibiting the Moral and Material Progress and Condition of India during the Year 1892–93. Twenty-ninth Number. 495

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1894.

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# STATEMENT

EXHIBITING THE

# MORAL AND MATERIAL PROGRESS AND CONDITION.

OF

# INDIA

## DURING THE YEAR 1891–92,

AND

## THE NINE PRECEDING YEARS.

TWENTY-EIGHTH NUMBER

(BEING THE THIRD DECENNIAL REPORT).

*(PRESENTED PURSUANT TO ACT OF PARLIAMENT.)*

*Ordered, by* The House of Commons, *to be Printed,*
24 *March* 1894.

LONDON:
PRINTED FOR HER MAJESTY'S STATIONERY OFFICE,
BY EYRE AND SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

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DURING THE YEAR 1891–92,

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THE NINE PRECEDING YEARS.

TWENTY-EIGHTH NUMBER

DURING THE PERIOD OF GENERAL REPORTS.

Ordered by The House of Commons, to be Printed,
24 March 1893.

LONDON:
PRINTED FOR HER MAJESTY'S STATIONERY OFFICE,
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India Office,
March, 1894.

ARTHUR GODLEY,
Under Secretary of State for India.

## NOTE.

This Report has been prepared under the instructions of Her Majesty's Secretary of State for India, by Mr. J. A. Baines, C.S.I., of the Indian Civil Service.

# PREFACE.

THE preceding Decennial numbers of this Statement ended with the years 1872-73 and 1882-83, respectively. On the present occasion it was determined to treat the decade as terminating with the year 1891-92, in order that it might more nearly coincide with the period intervening between two general enumerations of the population, the last of which took place at the end of February 1891.

The review has to be affiliated, according to statute, to the year 1891-92, but as the main object in view is to exhibit the course of administration and its results on the general condition of the people during the decade ending with that year, the latter has been given prominence chiefly as a limit, or point of comparison, instead of being treated in the detail that would be held necessary in the ordinary annual Return.

In general outline, the Decennial Statement for 1882-83 has been followed. On the one hand, however, the maps have been omitted and the historical preludes to some of the sections curtailed, whilst, on the other, chapters have been added relating to the Army and Indian Marine, to Vital Statistics, Sanitation, and Surveys, and a concluding Summary is given of the factors involved in the general condition of the masses, and their relative development and importance in the present day.

Some delay has been caused in the publication of this Statement, owing to the necessity of preparing special abstracts of the working of the different branches of the administration, consequent upon the change of period above mentioned, a change which did not allow time for the preparation of such abstracts by the Provincial Governments and Administrators in anticipation of 1892-93, the year originally prescribed for their submission.

India Office, London,
15 March 1894.

# CHAPTER I.

## AREA AND POPULATION.

Area and Population.

The British Empire in India is politically divided into two sections, the Provinces and the Protected States. The former, usually termed British India, is the territory immediately under the administration of the Crown; the latter comprises about 690 distinct units, each under its own Chief, and all acknowledging the suzerainty of the Paramount Power. The total area, as far as it has been surveyed, is about 1,560,160 square miles, with a population in 1891 of 287,223,431. But there is, in addition, a population of approximately 1,120,000 in the frontier and hill tracts, which were not included in the scope of the Imperial Census; nor are the large frontier States of Balochistan, Nepal, and Bhutan taken into consideration any more than the 844,000 inhabitants of the French and Portuguese possessions in India. Altogether, India may be said to contain a population of about 289,200,000, or nearly one-fifth of that of the inhabited world, as at present computed.

Density.

The figures with which this review is concerned are distributed as shown in the margin between the two political sections of the Empire. The Protected States contain 23 per cent. of the population on 38 per cent. of the area. This disproportion is due to the large tracts of thinly populated country included in Kashmer, Western Rajputana, and the hills of Central India and South-Western Bengal. Thus, the mean density is 230 per square mile in British India, and only 111 in the protected area. The latter will be treated in detail in the next chapter, but, for the purpose of comparison, it may be mentioned here that the lowest recorded density is found in Jesalmer, in the Indian desert, where there are but seven persons per mile, and the highest, 583, in the small state of Rampur, in the Rohilkhand division of the North-Western Provinces. In the case of British territory, the range is still wider, as in the district of Burma known as the Upper Khyndwin the population averages approximately but four per mile, whilst in that of Saran in Bihar it is 930, and rises still higher in the suburban district of Howrah, which is practically part of Calcutta.

| Section. | Area. | Population. |
|---|---|---|
| Provinces | 964,993 | 221,172,952 |
| States | 595,167 | 66,050,479 |
| TOTAL | 1,560,160 | 287,223,431 |

Taking the general mean density of both British and Protected territory, which is 184 per mile excluding the four chief cities, the marginal Table shows the proportion of area and population falling on each side of it. More than two-thirds of the population are distributed over less than a third of the area. But the State of Kashmer and the large Agency of Central India are here taken each as a single item, for want of accurate survey of their respective subdivisions, so it is more satisfactory, now that the general features of the distribution have been shown, to comment on the return as confined to British territory, where it is compiled on the uniform base of district areas. Thus restricted, the figures are as in the margin. About 18 per cent. of the area, chiefly in Assam, Sindh, and Upper Burma, shows an average of only 24 persons per mile. On the other hand, a quarter of the entire population is packed on to less than one-twelfth of the area. No fewer than 37½ millions live on a scale of more than one per acre, and over 21 millions average 877 per mile. The whole of the above are found in the Gangetic valley, and with the exception of some 2½ millions in the suburbs of Calcutta are almost entirely agricultural as regards their means of subsistence. In considering the condition of the people, in a later chapter of this review, it will be necessary to revert to this remarkable density. In the meantime it may be as well to note that the tract in question is as distinguished for its material resources as for

| Section. | Average Density. | Percentage of Area. | Percentage of Population. |
|---|---|---|---|
| Below mean | 87 | 69·06 | 33·04 |
| Above mean | 395 | 30·94 | 66·96 |
| TOTAL | 184 | 100·00 | 100·00 |

| British Territory. | Average Density. | Percentage of Area. | Percentage of Population. |
|---|---|---|---|
| Below mean | 102 | 65·65 | 29·53 |
| Above mean | 464 | 34·35 | 70·42 |
| TOTAL | 230 | 100·00 | 100·00 |

AREA AND POPULATION.

its great population. In other parts of India there are few examples of this concentration. Madras and the Panjab have each one district containing more than 600 persons per mile, where Bengal has 16 and its Gangetic neighbour 14; and the highest density in the Bombay Presidency is but 542. In the Provinces of Burma, Sindh, the Central Provinces, and Berar there is no district with a density equal to the general mean of 230 per mile. In dealing with so large a territory as is contained in some of the provinces, however, still more in treating of their aggregate, the average for the whole is often, indeed usually, a mere arithmetical expression, not typical of any considerable tract found within the limits from which it is derived, so that in describing the Province, as is done below, mention of its main subdivisions is advisable. A brief historical retrospect also is not out of place here.

British India has formed itself round the original possessions in what were once known as the three Presidencies of Madras, Bombay, and Bengal. Of these, the two first have preserved their former designations. Of the last, the only trace that now remains is found in the title of the heads of the Government and in the military organisation of Upper India. The three subdivisions of Bengal, Bihar, and Orissa that formed its nucleus, with the later additions of Chutia Nagpur and the sub-Himalayan tract, constitute the Lieutenant Governorship of Bengal. The Upper Doab, or the country lying roughly between the rivers Gandak and Jamna, still bears the clumsy and obsolete name of the North-West Provinces, and with Oudh has been placed under a second Lieutenant Governor, whilst the Panjab, including Delhi, the cis-Satlaj and the trans-Indus territory, forms the charge of a third. A still more modern creation is that of the Chief Commissionerships, two of which are direct offshoots of Bengal. First, that of the Central Provinces, formed in 1861; the second, Assam, was only constituted in 1874. There are four other continental charges under this title: Ajmer, British Balochistan, Berar, and Coorg; but they are merely subsidiary to an Agency or Residency, that is, a charge connected with protected States, directly subordinate to the Supreme Government. Ten years after the acquisition of the Pegu territory in Lower Burma the British possessions across the Bay of Bengal were consolidated into a Chief Commissionership, a title which has been retained for the whole charge, now that Upper Burma has also fallen into British hands. Finally, the small groups of the Andaman and Nikobar Islands constitute a charge under that same title. The Madras Presidency, save for the Laccadives, is a fairly compact territory; but Bombay, which also retains its rank as a separate Governorship, includes not only Sindh, which is not anywhere contiguous to its British territory, but the Settlement of Aden, 1,660 miles away, across the Indian Ocean, with its satellites, Perim, in the Straits of Bab-el-Mandeb, nearly 100 miles further off, Sokotra, off Cape Guardafui, Zaila, Berbera, and Bulhar, on the African mainland.

The following statement gives a few of the leading statistics concerning these territories, which will be henceforth respectively mentioned by the general title of Province, as distinguished from State, or tract under protection:—

| PROVINCE. | Area in Square Miles. | Population (1891), | Mean Density. | Number of | | Occupied Houses. |
|---|---|---|---|---|---|---|
| | | | | Towns. | Villages. | |
| Presidencies: | | | | | | |
| Madras | 141,189 | 35,630,440 | 252 | 214 | 56,867 | 6,709,990 |
| Bombay and Sindh | 125,144 | 18,901,123 | 151 | 216 | 24,988 | 3,380,640 |
| Lieut. Governorships: | | | | | | |
| Bengal | 151,543 | 71,346,987 | 471 | 146 | 227,019 | 13,592,154 |
| North-Western Provinces and Oudh | 107,503 | 46,905,085 | 436 | 484 | 105,716 | 8,225,191 |
| Panjab | 110,667 | 20,866,847 | 188 | 178 | 34,664 | 3,127,823 |
| Chief Commissionerships: | | | | | | |
| Central Provinces | 86,501 | 10,784,294 | 125 | 52 | 34,303 | 2,158,668 |
| Assam | 49,004 | 5,476,833 | 112 | 18 | 17,142 | 1,118,885 |
| Burma, Upper | 83,473 | 2,946,933 | 35 | 24 | 10,957 | 554,472 |
| „ Lower | 87,957 | 4,658,627 | 53 | 36 | 17,752 | 869,132 |
| Commissionerships, &c.: | | | | | | |
| Ajmer | 2,711 | 542,358 | 200 | 4 | 741 | 101,654 |
| Berar | 17,718 | 2,897,491 | 163 | 37 | 5,785 | 591,008 |
| Coorg | 1,583 | 173,055 | 109 | 5 | 492 | 26,806 |
| Andamans | - | 15,609 | - | - | 59 | 2,997 |
| Quetta, &c. | - | 27,270 | - | 2 | - | 4,543 |
| TOTAL | 964,993 | 221,172,952 | 230 | 1,416 | 536,485 | 40,463,963 |

*Madras*

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*Madras* stands first in rank of the local Governments, as it does in order of acquisition by the British. The first site possessed by the East India Company was that on which is now built Fort St. George, which is the official designation of the Government of Madras, as Bombay Castle is of the sister government, and Fort William of the Supreme Government when stationed in Calcutta. It was bought in 1639, and no addition was made for more than a century, when Masulipatam was captured from the French. A few years later the northern coast tract, known as the Circars (Sirkar) was ceded by the Moghal Emperor. At the end of the century, the fall of Tipu Sultan brought with it the Malabar Coast and the West-Central Division of Salem and Coimbatore, whilst Bellari and Kaddapah were ceded by the Nizam. Tanjore and the so-called Karnatak fell in a year or two later, and in 1838 the province was rounded off by the acquisition of the Karnul domains. The district of North Kanara was transferred to the province of Bombay in 1862, and a small village to Bengal in 1884. The province is divided on physical grounds into seven sections, some of which differ widely from the rest. Except the west coast, the south and the hills, none are exempt from occasional scarcity of rain, though the south-central is seldom affected seriously. On the other hand, the northern section lies well within the "famine zone," but during the greater part of the decade under review has been happily free from distress. There was a partial failure of crops, however, in 1891–92, in some districts on the border of the Deccan plateau, immediately to the south thereof.

Madras.

| Madras. | Density. | Rainfall. |
|---|---|---|
| | | *Inches.* |
| North Coast | 279 | 48·29 |
| Northern | 134 | 28·47 |
| East-Central | 359 | 39·51 |
| West-Central | 249 | 30·45 |
| South-Central | 458 | 44·48 |
| Southern | 319 | 32·46 |
| West Coast | 391 | 117·17 |

Bombay.

*Bombay*, again, was one of the early settlements of the East India Company, though no territory, beyond sites for a "factory" or place of business in Surat and other Gujarath towns, was acquired there till Charles II. sold the town and island to the Company in 1668. It was made a Presidency in 1708, but for three-quarters of a century the Company's possessions were not extended to the mainland. Then came the cession by the Marathas of a great portion of Gujarath, north of Bombay, and finally the downfall of the Peshwa in 1807, which brought with it most of the Deccan and south coast, and latterly an exchange with Sindhia. Sindh was annexed in 1843. Aden was captured in 1839. A protectorate was established over Sokotra and the Somali coast within the last ten years, as will be related in the next chapter. The marginal table gives the density and rainfall of the main physical divisions. The Deccan merges into the fertile valley of the Tapti in the north, and into the nearly equally favoured tract known as the Bombay Karnatak in the south-west; but the centre lies well within the zone of uncertain rainfall, and was the scene of the great famine of 1876–77. The Konkan, in spite of its heavy and certain rainfall, is by no means a fertile tract, owing to the general scarcity of deep soil and level ground, whilst Gujarath, with a relatively light fall, is the best off of all the tracts. Sindh, again, with a population of 2,881,774, is independent of rain, except in the extreme east and along the coast. Like Egypt, its welfare depends chiefly on inundation by the rise of a great river, so throughout the greater part of the country cultivation is concentrated along the rich alluvial border of the Indus and its distributary canals.

| Bombay. | Density. | Rainfall. |
|---|---|---|
| | | *Inches.* |
| Gujarath | 301 | 29·44 |
| Koukan | 210 | 104·66 |
| Deccan | 162 | 30·66 |
| Karnatak | 192 | 34·15 |
| Bombay Island | - | 74·23 |
| Sindh | 60 | — |

Bengal.

*Bengal*, the province that comes next in order of rank, comprises not only the tract that bears this historic name, but its neighbours Bihar and Orissa, with the plateau and hill country of Chutia Nagpur and the sub-Himalayan tract round Darjiling. At the time that the Moghal Emperor conferred the *diwáni* of the three first-named on the East India Company, Orissa and the greater part of Chutia Nagpur were under Maratha rule, and Darjiling formed part of Sikkim. The term Orissa seems to have been then given to what is now the district of Midnapur, still the linguistic frontier, ill-defined, between Bengali and Uriya. Orissa proper was acquired in 1800, and most of Chutia Nagpur passed over to the British 15 or 20 years later. Darjiling itself was ceded in 1835, and the territory below it was occupied partly 15, partly 30, years later. As regards

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regards administration, Bengal was under the Governor General till 1834, when he became Governor General *of India*, and Bengal was separately treated, though still directly under him. A Lieutenant Governor was appointed in 1854, before which time a corresponding officer had been necessitated for what were then the "Upper Provinces" of the Presidency, administered from Agra. The Bengal of the present day is the most populous charge in India, and the Lieutenant Governor is responsible for the management of a population of 71,346,987, or considerably more than that of the United States of America at their last Census in 1890. Taken by the historic divisions, Bengal proper contains a population in round numbers of 40,400,000; Bihar, of 21,265,000, and Orissa, as received from the Marathas, of 4,047,000. Chutia Nagpur returns 4,628,790 within the British portion of its area. The physical divisions are shown in the margin. Speaking generally, the whole of the province, except North-Western Bihar, and occasionally Orissa, lies within a highly favourable zone of rainfall, and famine is practically unknown in Bengal proper. In Orissa it prevailed on the historic occasion of 1866, and North Bihar was visited, to a certain extent, in 1874. But, on the whole, Bengal is, as the distribution of the population shows, a very fertile tract, and in Chutia Nagpur the light incidence of population is due less to climatic defects than to the want of arable land which is so prominent a feature in the hill tracts of Central India.

| Bengal. | Density. | Rainfall. |
|---|---|---|
| | | Inches. |
| Northern Bengal | 459 | 85·73 |
| Western „ | 562 | 58·11 |
| Eastern „ | 531 | 82·59 |
| North Bihar | 667 | 51·82 |
| South „ | 520 | 45·14 |
| Chutia Nagpur | 134 | 46·84 |
| Orissa | 411 | 58·86 |

Assam.

*Assam* was formed out of Bengal into a separate administration in 1874. It consists of two main valleys and the surrounding and intervening hill tracts. The Southern, or Surma Valley, formed part of the *diwáni* grant of Bengal, and bears a strong resemblance to that province, both physically and in population. The adjoining district of Kachar lapsed to the British Government in 1832. Assam proper, or the Brahmaputra Valley, was ceded by the Burmese after the war of 1826. The Khasi and Jaintia Hills were taken under protection at various times, but are still administered by the headmen of the petty tribes that possess them. The Naga, Garo, Lushai, and other hill tracts have been dealt with in the same way, and direct administration undertaken whenever circumstances showed the local chiefs to be incapable of restraining the predatory instincts of their followers. The conditions of the province are essentially favourable to cultivation. Famine is unknown, and the development of the tea industry has done much to introduce to the province a class of cultivators fitted by training to take advantage of its resources, for a considerable proportion of those who immigrate as labourers settle permanently on grants of land made over to them in the place of their sojourn.

| Assam. | Density. | Rainfall. |
|---|---|---|
| | | Inches. |
| Surma Valley | 333 | 146·27 |
| Brahmaputra „ | 117 | 87·12 |
| Hill Tracts | 25 | 92·03 |

North-West Provinces and Oudh.

*The North-West Provinces and Oudh.*—Up to 1877 these were under district administrations, but in that year they were placed under the charge of a single officer, who till recently bore the dual title of Lieutenant Governor of the one and Chief Commissioner of the other. The name of the former is a relic of the time when British territory extended no further in that direction, relatively to the "Lower Provinces" or Bengal. To the natives of India, the whole tract under the combined government, with probably Delhi and a portion also of North Bihar, is known by the name of Hindustan, and whenever that title is used amongst themselves it is always in this restricted sense. The greater portion of the North-West Provinces was either carved out of the former State of Oudh or conquered from Sindhia in 1805, the Gurkhas in 1816, and Nagpur in 1811. Oudh was founded about 1732 by the Wazir of the Delhi Court, who, like the Nizam in the Deccan, took an opportunity of proclaiming his independence of the Emperor. Until 1820 the title of the Chief was still Wazir, but in that year it was officially changed to that of King, by which the late occupant of the throne was known until his death in

| N-W. Provinces and Oudh. | Density. | Rainfall. |
|---|---|---|
| | | *Inches.* |
| Himalayan | 81 | 62.13 |
| Submontane | 486 | 46.43 |
| Upper Doab | 509 | 31.25 |
| Central „ | 470 | 28.38 |
| North-Central | 499 | 38.29 |
| South-Central | 652 | 38.42 |
| Southern | 221 | 37.51 |

in 1887. In 1856, owing to his continuous misgovernment, his dominions were annexed. During the decade under review, the North-West Provinces received the small addition of the town and fort of Jhansi, which were ceded by Sindhia in exchange for the cantonment of Morar, made over to that chief with the fortress of Gwalior in 1886. In the marginal table the two portions of the province are combined, as Oudh in all its more prominent characteristics resembles closely the portions of the North-West Provinces by which it is surrounded. Taking the two separately, the latter covers an area of 83,286 square miles, with a population of 34,254,254, and a density, therefore, of 411; whilst Oudh supports 12,650,831, on 24,217 square miles, that is, 111 per mile more than its companion. The difference is due to the light population of the Himalayan tracts and the hills to the south, which both fall entirely within the North-West Provinces, whilst Oudh is comprised within the Submontane and South-Central divisions, which as the table show are more densely peopled than most of the rest. The seat of Government is now at Allahabad, though Lucknow is still the residence of the Lieutenant Governor for part of the year. The Province received an accession of rank during the present decade by the establishment of a local Legislative Council, like that in Bengal, a change which will be noticed in a later chapter. AREA AND POPULATION.

*The Panjab* is by no means confined to the tract to which its name refers, namely, the five tributaries of the Indus from the East. The bulk of the Province was conquered in 1849, but as early as 1808 the cis-Satlaj territory came under British rule, and Delhi with its surrounding districts was transferred from the North-West Provinces in 1859, after the mutiny. There is now a long and important belt of country under direct administration west of the Indus and a considerable tract in the sub-Himalayan hill country, besides the central Doabs and the large western plains. A great part of the province is dependent upon irrigation for its cultivation, so that, as works are carried out by the State in connection with the great snow-fed rivers, the balance of population may be expected in the course of time to shift from its present position in the north-east of the province towards the west and south, where waste land only awaits water to bring it into the market. The divisions adopted in the marginal table are based mainly on climatic and other physical grounds, but they correspond to a considerable extent with ethnic, religious, and social distinctions, which in this frontier region, traversed by so many successive layers of immigrants and invaders, are of especial importance and interest. Thus, the west is almost entirely Musalman by religion, and largely non-Aryan by race. The centre contains the bulk of the Sikh community, whilst the east is more orthodoxly Hindu, as the waves from the east and west of Upper India meet just west of the Jamna. The Himalayan portion of the province, again, contains several special communities not found elsewhere in India, both Brahmanic and Buddhist. Panjab.

| Punjab. | Density. | Rainfall. |
|---|---|---|
| | | *Inches.* |
| Submontane and Central - | 381 | 26·79 |
| Eastern Plains - - - | 265 | 25·70 |
| Salt Range Tracts - - | 158 | 25·31 |
| Western Plains - - - | 81 | 7·50 |
| Himalayan Tracts - - | 83 | 54·97 |

*The Central Provinces* were formed, as has been mentioned above, in 1861, out of territory formerly under the North-West Province Government, acquired after the Pendhari War of 1818, to which was added the domain of the Raja of Nagpur, which lapsed in 1853. The headquarters are still at the late capital of that chief. Physically speaking, the territory in question consists of a large and fertile eastern plain but recently opened out by railway communication with foreign markets, a central belt of wild hills, inhabited chiefly by forest tribes, and two valleys. The rainfall, except in what is known as the Sagar territory, north of the Narbada, is fairly certain, and scarcity is seldom felt. The arable area that repays cultivation has been largely taken up, so that the reputation enjoyed for some time by this Province as an outlet for the population of congested tracts in neighbouring parts of India is now on the wane, but the existing population is a thriving one. Central Provinces.

| Central Province. | Density. | Rainfall. |
|---|---|---|
| | | *Inches.* |
| Eastern - - - | 142 | 53·49 |
| Southern - - - | 124 | 54·56 |
| Central - - - | 91 | 50·91 |
| Narbada - - | 136 | 46·67 |

*Ajmer* comprises the two districts of Ajmer and Merwara. The former was acquired from Sindhia in 1820, the latter had been occupied two

AREA AND POPULATION.

years previously in order to repress the raids of the Mer, a predatory tribe of the surrounding hills. The whole tract is a compact *enclave* in the midst of the great collection of states known as the Rajputana Agency, and has become an important railway centre between Western, Central, and Northern India. The Mer tract has been brought under settled and permanent cultivation, and a thriving town has sprung up in its midst. The population of Ajmer is 422,359, and of Merwara 119,999, with a density of 204 and 187 respectively. The rainfall is light, and by no means certain, so that on more than one occasion, including the year 1891–92, with which this decade closes, the population has been put to straits for forage and water. The administration is conducted by a Commissioner, subordinate to the Agent and Governor General for Rajputana.

Berar.

*Berar*, officially known as the Haidrabad Assigned Districts, is the tract made over to British administration to provide for the body of troops which the Nizam was bound by treaty to furnish in aid of the Supreme Government. The revenue, deducting the above charge and that of administration, is handed over annually to the Haidrabad State. The territory concerned consists of a fertile plain bordered by low ranges of hills on the north and south. It bears a strong resemblance in physical features and in population to the Maratha country, to the east and west of it. Like the Central Provinces, it has been recruited by immigration for some years, but now it shows signs of repletion. Berar has the agricultural peculiarity of growing more produce for export than for the support of its population, and is in great repute for its cotton, wheat, and oilseeds. The population was in 1891 2,897,040, or 163 per mile. There seems some ground for supposing that a number of people from the Deccan visited Berar during the famine of 1876–77 and have since returned to their homes in the south and west, as the distribution of the people seems to have become normal in the 10 years, instead of indicating the presence of an unusual proportion of adults. The Commissioner of Berar administers the territory, subject to the control of the Resident at Haidrabad.

Coorg.

*Coorg* became British territory in 1834, previous to which date it was under a mountain Chief, whose oppressive conduct to his lieges grew so notorious that a British force was marched from Mysore into the State, and deposed him. The tract lies amongst the Ghats to the west of Mysore, and is considered specially adapted for coffee and allied exotic products. Both European and native planters have settled there, and a considerable proportion of the population is attracted thither by the employment thus placed within their reach. The administration is conducted by a Commissioner, under the Resident in Mysore as Chief Commissioner. The civil and military station of Bangalore should be added to the list of British possessions, as it was reserved from rendition in 1886. It contains a population of some 100,000.

British Balochistan.

*British Balochistan* will be mentioned again in connection with the States under that Agency. The population shown under the head of Quettah, &c., in the initial table is merely that of the civil station and cantonment of Quettah, the detached cantonment of Lorelai, and the residents along the lines of railway, with the camps of the British officials on tour at the time the census was taken, in February 1891. The population of the rural tracts under the Chief Commissioner which it was not thought advisable to bring within the ordinary census operations, was registered as amounting to 145,217, but this figure is said locally to be considerably below the truth.

Andamans.

*The Andamans*, again, are a small charge, whereof only the settlement of Port Blair comes under detailed administration. The rest of the archipelago, as well as the whole of the Nikobars, are in the occupation of wild tribes in a primitive stage of civilisation. Port Blair was founded as a convict settlement in 1858, and now contains a population of 15,609, chiefly connected with the convicts and their discipline. The Nikobars were

Laccadives.

formally annexed in 1869, but have not been colonised. The *Laccadives*, with the isolated coral reef of Minikoi, to the south of the group, are divided into two sections: the northerly, or Amindivi, are administered as part

part of the South Kanara district on the opposite mainland; and the southerly or Cannanore group, with Minikoi, are similarly held to appertain during their sequestration to Malabar. The population is between 14,000 and 15,000, engaged in fishing and the preparation of cocoanut fibre. A visit of inspection is paid periodically by the officers responsible for their management, and by the Marine Survey parties: in other respects the inhabitants are left to themselves, and sail over to the mainland to inform the officials when anything occurs which they think worth communicating. AREA AND POPULATION.

*Burma* is the last province to be noticed. The coast of the lower division on each side of Pegu was occupied by the British in 1826. Pegu fell to the Government of India in 1852. The final "bite at the cherry," as it was described by Lord Dalhousie, was not taken till the beginning of 1886, when the injustice of the young king, together with his proclaimed intention of invading Lower Burma, led to his deposition and removal. This territory was occupied by the British force in October 1885, and formally annexed in January of the following year. Lower Burma is superior to the greater part of the Upper division of the province in fertility and other agricultural advantages, and can, and usually does, export to foreign parts almost as much rice every year as it consumes within its own limits or lends to supplement the stock of Upper Burma. There is a considerable area of arable land awaiting cultivation, and more is being made available in the lower delta by artificial means. In Upper Burma there is no lack of fertile land, but the rainfall is comparatively light and uncertain. Burma, like Assam, differs from most provinces under the Indian Government, in being a large importer of labour from other parts of the country, but the latter indents chiefly upon Bihar and Oudh, whilst Burma depends mainly upon the north coast of Madras. A scheme is in progress to establish farming colonies from Bihar in Lower Burma, but its prospects of success are not yet assured. The Province is administered from Rangoon by a Chief Commissioner, whilst the military arrangements are, for the time being, partly under the Madras command, partly under the Commander-in-Chief for India. Burma.

| Divisions. | Area in Square Miles. | Density. | Rainfall. |
|---|---|---|---|
| | | | *Inches.* |
| Northern | 22,580 | 28 | 47·00 |
| Central | 20,236 | 22 | 56·48 |
| Southern | 18,607 | 43 | 25·13 |
| Eastern | 13,050 | 59 | 40·75 |
| Total, Upper | 83,473 | 36 | — |
| Arakan | 14,536 | 46 | 191·11 |
| Pegu | 9,299 | 156 | 65·03 |
| Irawadi | 17,642 | 83 | 84·01 |
| Tenasserim | 46,590 | 21 | 160·04 |
| Total, Lower | 87,967 | 53 | — |
| Burma | 171,430 | 45 | — |

The above sketch is intended to be no more than an introduction to the review of the administration which forms the subject of the following pages. The province, it will be found, is the unit of comparison throughout the departmental chapters that follow, so it is useful to have at hand information as to how and when each political item was acquired, what is its place in the list as regards area and population, and what is the relation between these two facts in its various territorial subdivisions. In the concluding portion of the review, where the movement and condition of the people are in question, and, again, in treating of a subject influenced by conditions so numerous and varied as is agriculture, British India, as a whole, must obviously occupy the attention less than its component parts. The brief summary, therefore, that has been given above will be found, it is hoped, of service in connection with these and other allied topics.

The Protected States, which form the subject of the next chapter, are treated on a different plan. Their administration is here dealt with once for all, and not by departments and in detail; so the account of it has been added to that of the rise and fortunes of the State, with a general statement of the area and population.

## CHAPTER II.

### THE FRONTIERS AND PROTECTED STATES OF INDIA.

FRONTIERS AND PROTECTED STATES.

THE continental frontier of India presents a great and most interesting variety of political and ethnic elements. On the west, in the direction of Persia, are the pastoral freebooters of the Balochistan plains, succeeded by the warlike and predatory highlanders of the strip of mountainous country known as Yaghistan, or the Independent tract, that remains unground between the upper millstone of fitful aggression from Afghanistan, and the nether, in the shape of the uncompromising peace and order enforced by the British in the Indus Valley. Next comes the mountain barrier of the Himalaya, the greater part of which is under the comparatively strong administration of chiefs of Indian descent; but towards the east these give place to hill and forest tribes of Mongoloidic origin, which spread southwards, forming a fringe all along the frontier of Assam and Burma, where they meet their kinsmen under the sovereignty of China and Siam.

An account of the administration of India for the last 10 years would be incomplete, no doubt, without due notice of the relations that have subsisted between this borderland and the British Government during that period, but it is with the internal or protected States that this review has chiefly to deal. Here we are brought face to face with a series of political conditions absolutely unique, and, for complexity, variety, and the novelty of the principles that have to be applied for their regulation, without a parallel in any other part of the world. These States cover, as has been seen above, an area of nearly 600,000 square miles, and contain a population of more than 66 millions. There are, in round numbers, 690 of them, varying in size from Haidrabad, with its 11½ millions of subjects, to the petty chieftainship in Central India or Kathiawar, extending over a couple of villages, with less than 1,000 inhabitants. Many of them are not compact tracts at all, but a collection of villages here and there interspersed with the territory of other States, or embedded in the midst of a British province. From the brief account of each of the principal States which is given in a later part of this chapter two very striking facts may be appreciated. First, that with remarkably few exceptions these States, certainly in their present dimensions, rank, and position, are of more recent origin than the British Power in India. Secondly, that had it not been for the protecting arm of that Power there is hardly a single State that would not have long since been absorbed by a more powerful neighbour, or dismembered by fratricidal rivalry or internal sedition. The rise of the greater number of the States in the north and centre of the country took place during the decadence of the Moghal Empire, and the general anarchy and confusion that prevailed everywhere in India during the last half of the 18th century, and attended the downfall of the Maratha rule in the early years of the 19th. We thus find in power the successful freebooter, the favoured minister or general, and the rebellious deputy of his sovereign. In Kashmer the 27 per cent. of Hindus have their foot on the neck of thrice their number of Musalmans, and, in their turn in Haidrabad the followers of the Prophet rule over ten times their number of Hindus, and have, moreover, their own internal schism between those of the Deccan and the foreigners from the north of India. In Baroda, the Marathas, who are foreigners in race and language, are one in 50 of the population subject to them, and similar instances on a smaller scale are to be found all over the country. This state of affairs was stereotyped by the British Government, and it is to that Power alone that is due the entire absence of the disorder that the experience of former times would lead one to anticipate would result from such incongruity. It has been said that the relations of the British Government with the States of India fall into three historical groups. First, the international, when the two treated on terms of equality; secondly, the non-interventional, or, more correctly, as far as the latter portion of it is concerned, the period of subordinate isolation; thirdly, the period of supremacy and co-operation. It is just a century ago that the British Parliament declared that "schemes of extension of dominion in India are repugnant to the wish, honour, and policy

policy of the nation." From this principle there has been no deviation, and aggressive acquisition has ever been studiously avoided. Rotten fruit, as elsewhere, has fallen, and decaying limbs have been lopped off, where their disease was likely to spread to healthy timber, but the conditions leading to these results have invariably arisen within the organism itself, uninfluenced from outside. During the early years of the present century, what may be termed, from its initiator, the Cornwallis policy prevailed, and no engagement with the chiefs of India was made that could possibly be avoided. The results of non-intervention were soon seen in the interior of the country, where the marauding bands of the Pendhari became masters of the situation from the southern frontier of the Panjab to the north of the Karnatak. A new policy, that of protecting a State on condition of its abstention from contracting engagements with or attacking, any other, was inaugurated. This may be called the Hastings* policy, and in 10 years resulted in the suppression of the freebooters and the general pacification of the country. The supremacy of the British Government was consolidated during this period, so that, after its manifestation beyond reach of doubt in connection with the Mutiny of 1857, the way was clear for the existing, or the Canning, system, under which, in place of the policy of ruling by the separation of interests, the keynote is co-operation with the Paramount Power in promoting the welfare of the country as a whole. Next to the guarantee against aggression from without, the most acceptable concession to the chiefs has been that of the right of adopting an heir in accordance with the law of their respective communities in cases where, for want of issue, succession would otherwise have passed away from the direct line, or have been the subject of internal struggles, or, finally, have led to the lapse of the State to the Paramount Power. To appreciate the benefit thus conferred it is only necessary to glance at the history of the States during the last quarter of a century, and count up the instances, especially among the Rajput chiefs, in which advantage has been taken of the provision. In return for the guarantee of the integrity of their dominion and the perpetuation of their line, the chiefs have been invited to co-operate with the Government of India in promoting the welfare and developing the resources of the country at large, an invitation to which they have cordially responded. Reciprocal agreements have been passed by the States to the Paramount Power with reference to the mutual extradition of criminals and the assimilation of systems of regulating the production and distribution of salt, drugs, and intoxicating liquor. Trunk lines of road and railway have been constructed, and continuity of jurisdiction along the whole length ensured. The Imperial system of postage and telegraphs has been extended nearly all over the country, and trade has been largely freed from the vexatious and onerous duties that used, by antique custom, to be levied on goods in transit at each stated frontier which had to be crossed. Nor does the protection of the British Government stop at the frontier of India itself. Every State is prohibited from entertaining any diplomatic or political relations with foreign Powers, but, on the other hand, in order to enable those States to share in the wider field of commerce now open to them, it has been declared that their subjects abroad are as much entitled to the protection of the British flag as the inhabitants of territory directly under the administration of that Power, and in all international as in interstatal, concerns, the Government of India is the sole intermediary. The extent to which interference by the Paramount Power in the internal affairs of the State is carried can be better judged from the narrative given below than from any recitation of general principles. As the State is guaranteed against aggression from beyond its limits and from dynastic trouble within, the entertainment of a relatively large military force is obviously discouraged, and serious revolt is quelled by the aid of British troops marched in for the occasion; but the Paramount Power reserves its right to judge for itself in cases of popular insurrection against a ruler in a State thus protected, and its resources are by no means at the beck and call of oppression and injustice. It is not debarred, to use the words of one of Lord Canning's proclamations, "from stepping in to set right such serious abuses as may threaten

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* Or the resuscitation of the Wellesley.

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threaten any part of the country with anarchy or disturbance, nor from assuming temporary charge of a Native State when there shall be sufficient reason to do so. Nor is its right diminished to visit a State with the heaviest penalty, even to confiscation, in the event of disloyalty or flagrant breach of engagement." It does not require that the administration shall reach a certain standard, but prohibits it from falling below one, and there are special practices, such as sati, infanticide, and mutilation, or other cruel punishments, against which it has set its face, on general grounds, and the perpetration of which is always held to justify its intervention. Otherwise, the fact has been long generally recognised that, within the above limits, what would be considered laxity of administration in a British province has its compensatory advantages under the patriarchal system of a comparatively small tract, and, provided that those limits are not overstepped, there is no reason to do otherwise than tolerate defects in which the subjects of the State from long custom have acquiesced without reluctance or complaint.

Care of States during minority of the Chief.

During the last 25 years there are many of the larger and middle-sized States which have, from accidental or temporary causes, passed through a period of some years' duration of direct administration by a British representative, or by a council directed by one; or, again, by a joint administration, in which a chief or his minister has been associated with a European or Native official. During this period the foundations are laid, as a rule, for the management of the State on more progressive lines than would commend themselves to the chief of a former generation, or to the ladies of the zenana, by whom the education of a minor, which used to be their special charge, is conducted as far as possible on orthodox conservative principles. In the present day, however, chiefs and heirs to States are trained, during their minority, either under European tutors or at institutions specially provided for the purpose, under a European principal with Native assistants. The Gaikwar, Sindhia, and the Nizam, may be cited as instances of the former system, and the marginal note includes the name and size of some of the principal institutions in the latter category. A few instances have occurred of late in which the chief has sent his sons to be educated in England, but so complete a breach between the latter and the people over whom they will probably have to rule at some time or other is unusual, and not likely to become less so as the institutions and means of education nearer home grow in favour and efficiency. The facilitation of the journey to England, however, has been the means of attracting several of the chiefs less bound than the rest by the restrictions of caste rules and ceremonial, to spend a summer in the centre of the Empire, and some have even continued their voyage across the Atlantic. Even in India itself, a hill climate, or the varied society of the chief European settlements, appears to offer inducements to non-residence which were unknown to the chiefs of the last generation, and several of the States have had brought home to their administration somewhat forcibly the expense and inconvenience of an absentee ruler. But, on the whole, where the administration has once been well reorganised, and placed more or less on a line with that in the neighbouring British district, the personality of the individual who happens to be for the time at the head of affairs is, to a certain extent, neutralised; and as his subjects get to appreciate the benefits of settled government, on principles they understand, retrogression becomes, of course, every year more difficult. Nevertheless, it cannot be stated that disappointing instances of backsliding have not occurred; or that the tendency to relapse into the more personal system of government, once prevalent all over the country, has been yet more than partially counteracted.

| INSTITUTION. | Number of Pupils, 1891–92. |
|---|---|
| Rajkumar College, Rajkot | 41 |
| Mayo College, Ajmer | 63 |
| Daly College, Indore | 16 |
| Aitchison College, Lahore | 80 |

Military establishments.

It has been stated above that the protective obligations taken upon itself by the Paramount Power on behalf of these States precludes the necessity on the part of the latter of the maintenance of any military force beyond what is required by the internal circumstances of the State in question, and in many cases the strength of the force is restricted by the treaty or engagement, and in all, the entertainment of mercenaries of foreign race, such as Europeans, Arabs, Makrani, or Afghans, and so on, is either prohibited, or, as far as possible, discouraged. In the smaller States the

the line between military and police is very indefinite, and even in most of the larger ones the proportion of irregulars is high. The efficiency of the force from a military point of view varies according to the traditions of the State or the personal bias of the chief. Haidrabad is an instance of the one, the late Sindhia and the present chief of Marwar of the other. Taking both regular and irregular troops together, the estimated total strength of the force in 1891–92 was 324,670 infantry, 77,180 cavalry, and 6,150 guns, including those that are really serviceable, those which can be used for salutes only, and those which, if brought into action, would probably be of less value to the owner than to his enemies. FRONTIERS AND PROTECTED STATES.

Amongst the events of the decade in connection with the States under British protection in India, by no means the least important and gratifying was the movement towards co-operation in the task of Imperial defence, initiated in the autumn of 1887 by His Highness the Nizam of Haidrabad. This chief made the formal offer of assistance in men and money towards the protection of the North-west frontier of India, and his example was followed by similar offers on the part of all the principal chiefs of the country. So substantial and spontaneous an offer was taken into consideration by the Government of India with the least practical delay, and an officer of the British army was deputed to visit the various chiefs at their capitals, and to ascertain in what manner the loyal offer could be accepted, so that the aid in question could be rendered most efficient for the purpose for which it was designed, without throwing any additional or undue strain on the resources of the State that had so generously come forward. The results of this tour were that towards the end of 1888 the Viceroy announced at a ceremonial meeting at Patiala that the Government of India had given earnest attention to the offers of the chiefs, and had determined to accept them by raising a portion of their forces to such a pitch of general efficiency that it might take a place in line with the Imperial army of India. With this view, some British officers were deputed to various States for the purpose of selecting and training a body of troops to be thus utilised, which is now known as a body by the title of the "Imperial Service Troops." Lieutenant Colonel Melliss, of the Indian Staff Corps (Bombay), was appointed Chief Inspecting Officer of Native State troops. The States of the Punjab, with Kashmer and the Northern States of Rajputana, were first taken in hand. Gwalior followed, and within the year, Mysore, Rampur, and some of the States in Kathiawar, had been included in the scheme. The rest of the States selected are to be taken up as officers can be deputed for the training of the material available. In the year 1892, 13 officers were thus engaged, and in addition to Infantry and Cavalry, a Transport corps, a Camel corps, Pioneers, and two Mountain batteries (for Gilgit) were in training. Irrespective of the active assistance thus placed within the reach of the Imperial authority, the movement is calculated to have a good effect indirectly on the establishments of the States themselves, which have usually been swollen by numbers of retainers who were military but in name. In the short but sharp campaign against Hunza and Nagyr in 1891–92, the Kashmer Corps rendered good service with the British force. Offer of Military aid by Protected States.

In treating of the subject of this chapter in territorial detail, a beginning will be made with the Frontier and the States which abut on it, even though the latter may not all come within the category of Protected States as the term is generally used in connection with the British Empire in India. The North-west frontier will be first dealt with, and then the Himalayan barrier, whilst the valleys of the Irawadi and Mekong constitute the north-eastern limit.

*Afghanistan.*—The affairs of Afghanistan concern the policy rather than the administration of the British Empire in Asia; and the principal events that have taken place in this State within the last 10 years form the subject of separate reports which have from time to time been laid before Parliament during that period. It is superfluous, therefore, to enter into more detail concerning these matters than serves to complete the narrative given below of the progress of events on the North-west frontier of India. Afghanistan.

In the spring of 1880 Yakub Khan, lately Amir of Kabul, was a pensioner in the Sewalik hills; his brother, Ayub Khan, was holding Herat; Kandahar had been recognised as a separate principality, under a Wali, or chief, of the local family of the Barakzai, which had been recently in power

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power at Kabul. Abdur Rahman Khan, another member of the family, seizing the tide, appeared on the scene, as if *ex machina*, from Afghan Turkestan, where his father had been for many years all-powerful. The cordial welcome he received, and his reputation for shrewdness and force of character, designated him as the safest candidate for the uneasy seat lying vacant at Cabul. He accepted the offer made by the Government of India, and took up his position on the understanding that Kandahar was to be left independent, and that, as to Herat, he was to act as he thought advisable. Before he reached his capital, his cousin, Ayub, had met and driven back a British force which had marched out to block the way to Kandahar; and, before he had been on the throne three weeks, the intention of his relative to annex Kandahar to Herat, as his share of the heritage of Sher Ali, was frustrated by General Roberts, and Ayub was a fugitive on the road to Herat. The Wali of Kandahar, finding that he would probably be unable to maintain his position there, requested the sanction of the Government of India to his resignation of his governorship. The province was thereupon offered to the Amir, who eventually accepted it. Shortly afterwards, Ayub re-possessed himself of the city, but within a couple of months the Kabul army dislodged him, and he was forced to take refuge in Persia. He was interned there till 1887, when he attempted to re-enter Herat. His project failed, and after some wandering as a fugitive in the deserts along the Herat frontier, he surrendered to the British authority at Meshed, and finally became, like Yakub, a pensioner in India of the British Government.

In the meanwhile the Amir had shown the grip he had got over the country by the suppression, in 1886–87, of a widespread revolt against his rule on the part of the large and warlike tribe of the Ghilzai, who are Pathan, but not Afghan, by race. In 1887, too, the Amir was troubled by an insurrection, excited and headed by another of his relatives, Ishak Khan, Governor of the Turkestan portion of Afghanistan. This potentate marched on Kabul, but was met and signally defeated by the Amir's troops. He fled across the frontier, and now lives a pensioner on the Russian Government, in Samarkhand. The Amir followed up his victory by residing two years in the disaffected country, which, indeed, is that of his birth and early training. He has since undertaken the subjugation of the warlike tribes known as the Hazara, east and north-east of Herat, who, being neither Afghan or Pathan, hold themselves independent of Kabul. The task proved harder than the Amir had anticipated, and up to the end of the decade under review the Hazara had managed to hold out with considerable success, but have since been finally reduced. The country has not been free to either from other minor revolts against the Amir's authority, or resistance his tax collectors; but it is unnecessary to include them in the present sketch.

The negotiations and arrangements between the Russian and the British Governments, with regard to the demarcation of the northern frontier of Afghanistan, are to be found described in the reports published at the time in both India and England. An outline of the occurrences, therefore, is all that need be given here. As early as 1869 the matter was discussed by the two Powers; and in 1872 the views of the British Government were set forth in a formal statement, to parts of which, referring to the rights of the Amir to Wakhan and Badakshan, with those over several positions south of the Oxus, the Russian Government demurred. Finally, however, the discussion closed for the time, with the observation on the part of that Government, that "it did not refuse to accept the line of boundary laid down by England." In 1882, on the approach of the Russians to Merv, negotiations were again opened, and in the meantime Russia occupied that position, and proposed the demarcation of the frontier from Khojeh Saleh, on the Oxus, westwards. A Joint Commission was suggested, to begin work in the autumn of 1884, meeting at Sarakhs. Difficulties were raised by the Russian Government as to details of the ground to be traversed; and before these had been settled the local officer of that Government had occupied still more of the territory in question, and the Amir, too, pushed forward his outposts. The British portion of the Commission went into winter quarters whilst awaiting the arrival of their Russian colleagues. In March 1885 the Russians evicted the Amir's troops from the post of Panjdeh, from which the Afghans had been previously warned off. This put a stop to further

further proceedings. The British Commissioner returned to England, whilst the rest of the staff encamped on the Hari Rud. In September negotiations were again concluded, and in November the demarcation was taken up in earnest, and the whole line marked out between Zulfikar and Dukchi, the latter post being about 40 miles from the Oxus. Here the operations had to stop, as the position of Khojeh Saleh, above-mentioned as the extremity of the frontier, could not be settled to the satisfaction of both parties, and it was open to question what were the rights to be adjudicated in connection with the strip of cultivated land along the course of the river. At the beginning of September 1886 the Commission dissolved. In the July of next year mutual concessions were agreed to on the part of Russia and the Amir, and accepted by England; so, early in 1888 the demarcation was brought to a close. Whilst the British officers on the Commission were in the neighbourhood of Herat, the opportunity was taken of investigating an outstanding disagreement between the Amir and the Persian Government, regarding a boundary line on the west, and, after protracted discussion, the arbitration of the British officer at Meshed was accepted in 1891 by the Shah, and the matter settled. Since the close of the period under review a question has arisen in connection with the boundary line between Russia and Afghanistan on the Upper Oxus, which is still under discussion. A special mission has also been sent to settle the outstanding questions regarding the Indo-Afghan frontier.

## THE NORTH WESTERN FRONTIER.



*Balochistan.*—Under this title are included some nine territorial items, beginning with Kalat and Makran, and ending with the tract known as British Balochistan.

Balochistan.

Kalat.

*Kalat* is the Chief of the territories under this Agency, and nearly all Balochistan proper is in some way connected with it. The British connection with Kalat dates from about 1838, when the Kabul negotiations were in progress. Shah Shuja had taken shelter for a short time with the Khan, after the failure of his first attempt to recover possession of his dominions; and when a British expedition had been organised it was found convenient to pass it into Afghanistan through this State. Between the above-mentioned year and 1842 on two occasions the British Government had to interfere in Kalat affairs, but the relations with that State were placed on a more definite basis by the treaty of 1854 whereby the Khan acknowledged his subordination to the British Government, agreed to enter into no engagements with other States independently of the consent of that Government, and was granted accordingly an annual subsidy of Rx. 5,000. The Chief, Khodadad Khan, who was deposed in 1893, was selected by the local chieftains to succeed his cousin, on the death of the latter in 1857, and the greater part of the earlier years of his rule was occupied in getting the better of his feudatories, and in endeavouring to keep in order the turbulent tribes on his frontier. In order to secure, as far as possible, the peace of the State, to check the continual raids by the Marri and Bhagti tribes, and to protect trade between South Afghanistan and India, the British Government established an Agency in 1877 at Quetta, with subordinate posts at Kalat and other stations. The Quetta district was leased in 1883, at a rent of Rx. 2,500, with a subsidy of Rx. 3,000, in lieu of the right to collect tolls at the Bolan Pass. This tract has now been connected with the railway system of North Western India, with an extension of the line to the Afghan frontier between British Balochistan and Kandahar. The alternative route from Quetta to Sibi, by the Bolan Pass, is also under improvement. No regular census has been taken of the tract in British occupation, but in February 1891 the population of the cantonment and civil station of Quetta, and that along the railways and at the outlying stations of Lorelai and Sibi, was enumerated in connection with the Imperial operations, and found to amount to 27,270. The rest of the territory probably contains, at a rough estimate, some 350,000 inhabitants. Part of this tract was occupied during the Afghan war of 1878–80, and retained on the conclusion of peace. It includes Pishin, Sibi, Harnai, Shora-rud, and Thal Chotiali. The valleys of Bori and Zhob, north of Thal Chotiali, were occupied in 1887 and 1889 respectively, in consequence, in the first instance, of raids by the Zhob Kakar tribe. Afterwards,

*Kalat.*—Area, approximately, 106,000 sq. miles.
Population - - - 220,500.
Gross revenue - - Rx. 80,000.
Has leased the Quettah district for Rx. 2,500 per annum, and receives Rx. 3,000 in lieu of tolls at the Bolan.

North Western Frontier.

when the Zhob chieftains had had experience of the results of British control in the Bori valley, they applied for a similar arrangement for their tract; and when it was decided to open out the Gomal Pass in 1890, this arrangement was made, and the surrounding tribes were also brought into the sphere of influence.

Las Bela.

*Las Bela* was originally a province of Kalat, with an area of about 8,500 square miles, a population of some 56,220 souls, and a revenue of about Rx. 20,000. It has, on more than one occasion, endeavoured to establish its independence of the Khan; and in 1868, after an unsuccessful attempt of this sort, the chief fled for refuge into British territory, where he was detained on a pension from the Khan. In 1877 the Jam, which is his local title, was pardoned and restored, and died in 1888. The succession was disputed, but finally the present chief was installed, by sanction of the Government of India, in 1889.

Kharan.

*Kharan.*—This chiefship lies on the borders of Kalat, Afghanistan, and Persia. The inhabitants, however, are mainly Baloch, and since 1884 the chief has acknowledged his allegiance to the Kalat State. Tribal service is performed by him in consideration of a payment of Rx. 600 per annum. The present chief succeeded his father in 1886. The area is about 15,000 square miles, but the population has not been enumerated.

Makran.

*Makrán* comprises several small estates, of which *Kéj* is the chief. It was in consequence of encroachments upon the boundaries of this State that in 1871 the Persian frontier was investigated, and its demarcation by a Joint Commission, accepted by both the British and the Persian Governments. *Panjgur* is like *Kéj*, subordinate to Kalat, and the two were at perpetual warfare until 1884, when the Agent to the Governor General visited the scenes of disturbance, and effected a settlement. It has not, however, been implicitly observed by the border villages of the Gichki and Noshirwani tribes.

Boleda, Tump, and Mand.

*Bolédo, Túmp,* and *Mand* are minor districts, each containing but a few villages, subject to the general authority of the Khan of Kalat, who claims a share of the revenue, without, however, enforcing his demands. The frontier tribes of the Marri and Bagti have been mentioned as having broken loose occasionally from the control of the Kalat State. In 1880 the rising was so serious that an organised expedition had to be undertaken by the Government of India for its repression. General Macgregor encountered no resistance, and exacted retribution and hostages for good behaviour. Since then the tribes have complied peaceably with the terms agreed to, involving service in consideration of small tribal payments. A special agreement was entered into by the Government of India with the Tumandar, or chief, in whose territory lie the petroleum wells of Khatan, which have been under investigation during the period under review.

Amongst the events of the year 1891–92 the most striking, perhaps, were the deaths at their posts of two of the Agents to the Governor General of Balochistan. Sir Oliver St. John, K.C.S.I., R.E., died of pneumonia at Quetta, after he had held charge of his office less than a month; and Sir Robert Sandeman, for whom Sir Oliver St. John was officiating, returned in the middle of November of the same year, and proceeded on tour to settle the affairs of Las Bela. The day after his arrival at Sonmiani he was attacked by influenza and fever, resulting in pneumonia, to which he succumbed within the week. Sir Robert had served for more than 30 years on the North-west frontier, and his influence over the tract which he had so long administered was recognised by all the turbulent communities with whom he had to deal. In notifying his death, the Government of India concluded with the words, "He was a brave and devoted servant of the Queen, and he died, as he had lived, in the discharge of his duty. The death of such a man is a public misfortune, and the Governor General in Council deeply deplores it."

The extension of the work and responsibilities of administration of the territories directly under the Agency now known as British Balochistan, necessitated the strengthening of the local establishment; so, early in 1891, the Government of India appointed a Revenue Commissioner to undertake the detailed management of such branches of the administration as the Land Revenue, Excise and Stamps, Finance, Police, and Municipal affairs, Trade, Forests, Jails, and Registration. During the first year of the new system the Commissioner placed on a definite

definite and regular basis the accounts with the Imperial and Provincial treasuries, and revised completely the district sanctions for police and levies, a task of no small difficulty. The supervision, moreover, now available of the financial work of the various branches of the Agency has been justified by the improvement in the results of the year's administration. North-Western Frontier.

*The Punjab Frontier Tribes.*—Between India and Afghanistan intervenes a belt of mountainous country in the occupation of numerous tribes, mostly, though not entirely, of Pathan race, who claim to be independent alike of Calcutta and Kabul. Punjab Frontier Tribes.

The frontier line in question sketches from the Khagan valley to the Gomal river, which separates it from Balochistan. Roughly speaking, the tribes muster some 180,000 fighting men; and since the first outbreak of the Wahabi settlement on the Indus, in 1863, with the exception of four years between 1864 and 1868, there has seldom been a year without a disturbance at some point or other on the line; sometimes merely local and confined to a small clan, at others more serious and widely spread. The strengthening and the improvement of the border police and militia during the last 10 years have done much, however, to keep within due limits the raiding propensities of the frontier villages in the hills, and minor outrages are accordingly less frequent. The settlement of the Waziri, Shirani, and Batanni tribes, too, has been materially furthered by the arrangements concluded for the opening up of the Gomal valley for traffic; and during the winter of 1890–91 a railway survey, which is a proceeding hitherto regarded with the utmost suspicion, was carried out through that pass without hindrance or opposition. Unfortunately, however, this desirable attitude is of comparatively recent growth, and the decade has not passed without its stirring incidents. On the conclusion of the Afghan war the control of the Khaibar pass was left in the hands of the British Government, which at once took the local sections of the Afridi and Shinwari tribes into consultation. The headmen of these clans, who practically occupy both sides of the pass throughout its length, agreed, on the recognition of their independence and in consideration of a subsidy of Rx. 8,754, to maintain an armed corps, now known as the Khaibar Rifles, under their charge and management, for the protection of traffic, at an additional cost to the Government of India of Rx. 8,739. The entire responsibility for the security of the road up to the Kabul frontier was thus accepted by them, and the settlement has worked efficiently up to the present time. The corps in question has improved in material and discipline; so much so, that a portion was detached for active service with the British troops engaged during the early part of 1891 against the Hasanzai in the Agror valley. More recently a somewhat similar provision was made in connection with the Mahsud Waziri, on the Gomal. In 1890 three sections of this important tribe entered into an agreement to guard and keep open the Gomal pass, in consideration of an annual allowance of Rx. 3,046, in addition to their former grant of Rx. 1,900. Levies, costing, with personal grants to headmen, the sum first named, were employed for carrying out the above terms, and since these negotiations, arrangements for the settlement of outstanding intertribal disputes have been satisfactorily concluded.

Further north, the Orakzai clans bordering on the Kohat district recommenced a course of marauding on the Miranzai valley similar to that which led to the expedition of 1855. They also occupied lands on the south side of the Samana range, the crest of which was the boundary between their territory and the above valley, and in 1891 refused to pay the assessment on them. After the occupation of their chief strongholds by a small force, and the punishment of the principal offenders, the clans in question submitted unconditionally. It was resolved to maintain a garrison on the Samana range to cover the construction of fortified posts and of roads to them, and to see to the payment of the land occupied within the British frontier in the Miranzai valley. But when the main body of the troops had been withdrawn, a coalition of Orakzai and Afridi was formed, and on the 4th of April 1891 an attack was made on the guards protecting working parties on the range, and the surrounding clans at once took up arms. A second expedition was thus rendered necessary, and by the 17th of the same month the crest of the Samana was reoccupied. The troops then

North-Western Frontier.

traversed the whole of the Khanki valley, on the north side of the range, and the country beyond it to the Marghan ridge. By this time the tribes had again submitted and entered into agreements, recognising the crest and watershed of the Samana as the frontier, and undertaking to pay revenue for land occupied within it, and to be responsible for the good conduct of the surrounding clans. On the other side, the Government of India granted subsidies to the amount of Rx. 101 to each of the three clans immediately concerned, and in 1892 extended their payments on the same system to three other clans.

On the conclusion of the Afghan war the Kuram valley was definitely excluded from the Kabul dominions, and the tract occupied by the Turi and Bangash tribes declared to be independent. Of late years the feuds between the former, who are the dominant population, and the Waziri tribes adjoining their territory, which had been almost dormant since 1877, showed signs of recrudescence, and a British civil officer was deputed in 1885 to the Thal outpost in order to do what he could to assuage these hostilities. In 1887, however, it was thought unnecessary to keep him there any longer, as the experiment was not successful in achieving its object. In 1888 a joint British and Afghan Commission endeavoured to settle outstanding Turi quarrels with their neighbours, but this attempt also failed, and on the withdrawal of the British Commissioner, the Kabul Government was informed that the independence of Turi having been recognised by the Government of India, no internal interference from the side of Afghanistan could be allowed. Complaints of ill-conduct against the Turi continued to be made, and in the meanwhile a somewhat famous robber chieftain of the adjoining tribe of the Zaimukht took the opportunity of getting possession of the Lower Kuram. On the appeal of the Turi for help, the Government of India at the end of 1892 despatched a political officer with military escort to effect a settlement and occupy the country.

In the hill tract of which the Takht-i-Sulaiman is the centre, the Shirani tribe of Pathans, after more than eight years of quiescence, began, in 1882, to make raids into British territory, so that from the beginning of 1883 a blockade had to be established. This reduced the offenders to terms after six months continuance. At the end of the same year, during the progress of a survey of the Takht mountain system, their behaviour was satisfactory. Not so that of the Khidirzai section of another clan, belonging to the eastern (Lurgha) face of the mountain, who attacked the survey escort, and in 1890, when the negotiations regarding the Gomal traffic were in progress, not only stood aloof from the agreement into which the rest of the Shirani, like the Waziri, had entered, but attacked the cavalry patrol in the valley near Appozai. A flying column was sent late in 1890 from the Balochistan side, co-operating with the main body of the expedition from the Panjab. The only resistance offered was from small gangs, and the tribe as a whole agreed to the terms laid down. The leader, who had fled, subsequently submitted, and after a few months confinement was restored to his tribe, which by that time had paid up the fine imposed for the attack in the pass above mentioned.

The most serious difficulty that has taken place on this frontier during the period under review is that in which the Hasanzai and Akazai sections of the great Yusufzai tribe were concerned. These communities occupy both sides of the Indus north of Hazara, those on the left bank live on the west of what is known as the Black Mountain region, the rest opposite them. Since 1851 four or five expeditions have taken place in punishment of raids made by either one or the other of these clans, and in 1884 they came into collision with each other. Affairs continued in an unsettled state till towards the end of 1887, when matters were brought to a head by the refusal of Hashim Ali Khan, chief of the Hasanzai, to send into Agror witnesses for the defence of one of his servants who was being tried for several murders in that territory. Instead of complying, Hashim Ali made an attack on a solitary hamlet, and killed two men, taking away as captives two more. In June 1888 the Akazai attacked and killed a small body of a British Gurkha regiment on a route march in the neighbourhood. An expedition proceeded through the country of both clans, and collected the fines that had been imposed and obtained the usual agreements from the representatives of each. In 1890 the Government of India decided to make roads in Agror up to the crest of the range that formed the boundary, and warned the tribes of the neighbourhood

neighbourhood not to interfere with the expedition sent for the purpose. in defiance of this proclamation Hashim Ali assembled both his own and the Akazai clans, and occupying some positions within British territory, attacked the force on its march. In the spring of 1891, therefore, the Hazara field force occupied the whole of the territory of the two clans. Hashim Ali fled, but the rest of the leaders made terms, and agreed amongst other things to refuse shelter to Hashim Ali, and to surrender him if he re-entered their country. Next year, however, it was found that this chief had not only returned, but had settled down at Baio. The clan was ordered, accordingly, to evict or surrender him within a month, and as the leaders did not comply, a force was sent up to Baio, which was occupied and the defences destroyed, but Hashim Ali again escaped and is still at large. North-Western Frontier.

The two clans of the Yusufzai tribe which inhabit the Baner valley, north of Peshawar, made two serious raids on the adjacent villages in 1884, and a blockade was established which failed to have the desired results until early in 1887, when the leaders accepted the terms offered by the Government of India. Many other raids of a less serious nature took place along the frontier, but in no case was noteworthy resistance offered when retribution was demanded. Family or tribal feud, as much as the desire of booty, seems to have been the actuating impulse in most of these occurrences.

*Kashmer* is a composite State of comparatively modern constitution. Its more correct title is Jammu and Kashmer, for reasons given below. It comprises first, the valley from which it takes its more popular name, secondly, the State of Jammu lying amongst the southern spurs of the Western Himalayas, and then, the three outlying tracts of Ladak, Baltistan or Skardo, and Gilgit. with Chitrál, Kashmer itself was under Skythian or Hindu chiefs till the beginning of the 14th century, when the last of his line was ousted by his Musalman minister. At the end of the 16th century, the Emperor Akbar occupied the valley, and attached it to the crown of Delhi. About the middle of the 18th century it fell a prey to an Afghan adventurer, whose line succumbed to Ranjit Singh in 1819. On the downfall of the Sikh power in 1846, the British Government made it over to the Rajah of Jammu, on certain conditions of dependence and military service, with the payment of a sum of Rx. 750,000. Jammu is a sub-Himalayan tract which has always been ruled since history began by a dynasty of the Dogra Rajput tribe. Under the protection of Ranjit Singh, the representatives of this family obtained possession of all the neighbouring petty States in the hills, and in the course of internecine struggles the most powerful survived to become the ruler of the present Jammu province of the Kashmer State, and with the exception of the small estate of Punch, which is held on subordinate tenure, the rest of the line was absorbed. The population of Jammu at the last census, including Punch, was 1,439,543; and that of Kashmer 949,041, of which about 119,000 are included in the city of Srinagar. No trustworthy census seems to have been taken before 1891. Previous to the famine of 1878–80, natives of Kashmer were forbidden to leave the State, but in the stress of circumstances during the above years this prohibition was relaxed, and numbers of people crossed the passes into the towns of the North Panjab. It appears, however, from the last census, that, with the exception of a colony of weavers in Amritsar and the neighbourhood, most of the emigrants have since returned to their native land. In 1885, the Maharajah Ranbir Singh died, and was succeeded by his eldest son, Pratap Singh. The opportunity was taken of making a change in the political relations between the Government of India and this State, in order that the representative of the former might be in a better position to influence the chief to undertake reforms in the administration, which the events of several years preceding the death of the late ruler had proved to be urgently needed. But, after four years of power, the Maharajah voluntarily resigned all active participation in the administration of his State, and a council, consisting of his two brothers and some selected officials, was sanctioned by the Government of India. In 1891, at the request of the chief, some of his powers were restored, and he became President of the aforesaid council. The system has worked satisfactorily, and

Kashmer.

Approximate area - - 80,900 square miles.
Population 1891 - - 2,543,952.
Gross Revenue 1891 - Rx. 470,000.
Military force about 9,970 of all arms.

*Tribute.*—Military aid to British forces employed in hills or adjacent territory; annually, one horse, three pairs shawls, 22lbs of finest wool and 3lbs. woollen yarn.

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and several of the more important reforms have been taken in hand. A railway has been built between Sialkot and Jammu, which was opened in March 1890. A road suitable for light wheel traffic has been completed between Rawal Pindi and the western portion of the Jhelam valley in Kashmer. Telegraphic and postal arrangements have been placed in the hands of the British authorities. A land revenue settlement under a British officer has made considerable progress.

Ladak and Skardo.

*Ladak.*—The Wazirats of Ladak formerly belonged to Chinese Thibet, but after some vicissitudes both this tract and Skardo fell before the Sikh troops. Ladak supports a population of only 28,250, and Skardo its neighbour of a little over 110,000. The frontier line to the north of these tracts has not yet been demarcated, owing to the great height of the ranges of mountains that run along it, and the sparsity of population and means of supporting it. Of late years, however, the tract has been traversed by many travellers, and its general features are pretty fairly ascertained. The work of Captains Younghusband and Bower and Mr. Conway in this direction has been duly recognised by the Royal Geographical Society and others interested in the scientific exploration of such interesting and little known parts of the world.

Gilgit.

*Gilgit* seems to have been independent till the beginning of the 19th century, but owing to the inter-tribal feuds of the chiefs of Yasin, Punial and Nagyr it fell a prey to the Sikhs in the earlier years of their occupation of Kashmer. It is separated from the rest of that State by mountain ranges of considerable height, traversed by few and difficult passes. A rough census by households that was taken in February 1891 shows a population of about 16,700. In 1877, the Government of India thought it advisable to station an officer in Gilgit for political control. He was withdrawn, however, in 1881 ; but in 1889, owing to the unsatisfactory relations between the Kashmer State and the frontier chiefs of Hunza and Nagyr, who are subordinate to and subsidised by Kashmer the office was re-established, and the State garrison furnished by Kashmer, placed under the control of the Agent. The Chalt Fort, which lies between Kashmer and the territories of the two chiefs in question, had been for some years a disputed possession, and in 1877 the Kashmer authorities occupied it with a small garrison. In 1888, however, the two chiefs combined and ousted this force, but the suzerain State rallied and expelled the intruders. During the next year the British Agent visited the tract in question, and got them to agree, in consideration of a slight increase in the subsidy allowed them by Kashmer, to live in peace, and keep the route through their country from the north clear for trade from Central Asia. In 1891 it appeared that they had not any intention of keeping their word. A joint demonstration was made against Chalt, and though it dispersed without attacking the fort, the proposal by the Agent and the Kashmer authorities to make roads up to and through their territory was not only declined, but led to the collection of the hostile tribes for the purpose of obstructing the project. After sharp fighting, their positions were carried and occupied. The chief of Nagyr submitted, and was recognised by the Kashmer State, with the approval of the Government of India. His colleague of Hunza fled, and in his place his half-brother was installed, in September 1892. Both the Government of India and the Kashmer State withdrew their subsidies in consequence of the misconduct of the two chiefs.

Chitral

*Chitral.*—Next to Gilgit comes the State of Chitral, which since 1880 has included both the tract originally known by that name and the higher valleys of Yasin and Mastuj. In 1878, the Mehtar or Shah Kathori, the Musalman descendant of the probably very ancient Skythian dynasty, which has held these secluded tracts as far back as history reaches, acknowledged his subordination to Kashmer and accepted from that State a subsidy of Rx. 1,200, which was raised 10 years later to Rx. 1,800, with a small addition from the Government of India. Since the abortive outbreak of Pahlwan Bahadur, of Upper Chitral or Yasin, in 1880, and the occupation of his teritory by the Mehtar Kathori, the latter has done much to strengthen the position of the Kashmer State in this direction. In turn, Chitral has been formally taken under the protection of the British Government,

Government, with reference to possible encroachment from the side of Afghanistan, a curious form of expulsion. In 1892 the Mehtar, Aman ul Mulk, died, and his younger son was recognised as his successor. The uncle of the young Chief, however, attacked and murdered his nephew, and then had in turn to retire before the elder brother of the deceased, Nizam-ul-Mulk, who is now in possession. North Western Frontier.

*Dir.*—To the south of Chitral lies the small state of Dir, which for some time was connected with Kashmer through obligations incurred by the late chief for aid rendered by the latter state in a fraternal struggle for the throne. His son, however, was, in 1890, expelled by the Chief of Jandol, and sought refuge in Swat. Dir.

*Chilas, &c.*—Between Gilgit and the north-western corner of the Panjab lie several small States, known as Shin Yaghistan. Of this little-known tract the most important communities are those of Chilas and Darel, both of which pay a nominal tribute in gold dust to Kashmer. Darel lies on the right bank of the Indus, and, beyond helping Yasin against Chitral in 1880, does not appear to have been concerned in any of the frontier struggles. Chilas is situated on the opposite, or Kashmer, bank, between the Tor Valley and the Nanga Parbat, the highest peak of the Himalaya in this direction. It has come prominently to notice since the end of the period to which this review, strictly speaking, relates, by reason of an attack made by some of its villages upon the neighbouring Gilgit frontier, necessitating military action, and the punishment of the tribes concerned. The pacification of this part of the country is likely to facilitate communication between India and Gilgit, as a route by the Khagan Valley has been found which will prove more practicable than those across the mountains. Chilas, &c.

## NORTHERN AND EASTERN FRONTIER STATES AND TRIBES.

The large and interesting State of Nipal may be fairly taken to belong to India, though its political connection with the latter may happen to be at present less close than that of other frontier tracts. The greater part of the country lies to the south of the main chain of the Himalaya, and, in spite of the deadly climate of the forest belt that intervenes, communication with the plains of India is, on the whole, easier than with Thibet, which is only reached by long and difficult passes over the snowy ranges at the point where the latter are at their greatest elevation. Then, again, though the mass of the population of the State is, without doubt, of trans-Himalayan origin, and akin to the Mongoloidic races that border India on the north, there is a strong strain of Indian blood throughout the lower valley, due to the flight thither of Hindus driven from the plains of Oudh and Bihar by the Musalman invasions, or even earlier, and the modern ruling race, not without some reason, claims descent from the same ancestor as the family that has uninterruptedly occupied the throne of the oldest and most honoured State in Rajputana. It was the incursion of this race, indeed, that caused the preceding dynasty of Nipal to enter into political negotiations with the British, when the latter had been but a short time settled on the Hughli. Aid, however, could not be given in time to prevent the weaker from falling before the invader, but within the same generation a similar application had to be made by the Gurkha Chief himself, when his aggressive action towards Thibet had embroiled him with China. For many years after this, with the exception of the sharp fighting of 1814, the British Government confined its attention to commercial intercourse, and the occasional protection of members of the ruling family whom the course of palace affairs compelled to leave their home. On the accession to power of the greatest of Nipali Ministers, Jang Bahadur, in 1846, relations were drawn closer, more especially after that statesman had, to use his own expression, which has become historical, "stood on London Bridge." Nevertheless, Nipal adhered to its general policy of seclusion, and in the cases of disturbance that have arisen more than once between this State and the Thibetan authorities the intervention of the Government of India has not been invoked. The death of Jang Bahadur, in 1877, was followed by some disorder, arising, in the first instance, from family disputes about his estates. His successor was Sir Northern and Eastern Frontier States and Tribes

Nipal

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Sir Ranodip Singh, his younger brother, who, after weathering one or two conspiracies, fell a victim to another, headed by some of his nephews, in 1885. Bir Shamsher, one of the successful aspirants to power, was appointed Minister by the Maharaja Dhiraj, then 10 years old, and, following the precedent of his late uncle, united his family with that on the throne by marrying, in 1889, two of his daughters to the present occupant thereof. Nothing else of special note occurred during the decade as between the British Government and this State, excepting a courteous relaxation by the latter, in 1888, of the rules under which Gurkhas recruits for its army could be obtained from Nipal by the former. Certain of the hill tribes of the State furnish admirable material for regiments employed all along the northern frontier, from the Punjab to Burma, and to keep up the strength of these troops by recruitment entirely beyond British territory had always been a matter of some difficulty, which the negotiations of 1888 removed. So entirely have the Nipal authorities met the wishes of the Government of India in this matter, that in the year 1891–92 more men than were actually asked for were allowed to present themselves before the British recruiting officers; the result being an improvement in the average of those selected. At the special request of the Minister, his Excellency Lord Roberts visited Nipal, in March 1892, and saw a review of all the troops available in or near Khatmandu, an unexampled manifestation of confidence and cordiality on the part of this hitherto exclusive State. Nipal, it should be mentioned, though paying no tribute to the British Government, is in the habit of sending one of the nobles of the Court with messages and presents to greet a new Viceroy on his arrival at Calcutta.

This State was not included in the census operations, so there is no trustworthy information regarding its population, which is estimated, however, at about 2,000,000. The revenue is similarly stated to be about Rx. 1,500,000, and the military force at 920 guns, 1,950 gunners, 50 cavalry, and 48,000 infantry. Apart from its size and importance as a frontier State, Nipal has a special interest of its own, socially and ethnologically. There are races and dialects in the fastnesses of the Himalaya of which no specimens are found elsewhere, whilst in the Hindu or non-Buddhistic part of the country Brahmanic orthodoxy is to be seen in its fullest development, and therefore very different from what it is in India itself, for the great valley enjoys the distinction of being the only important tract in the country in which the Musalman conqueror never managed to set foot.

Bhotan.

*Bhotan* is another Himalayan State that lies politically beyond British India, though connection with it is maintained by engagements and subsidies. The government is dual in form, the spiritual chief being always an incarnation of the founder of the State, who came from Thibet between four and five centuries ago. The administration is in the hands of the temporal Raja, who is elected from amongst the great officers of state. Intercourse between Bhotan and the British began, practically, with the occupation of Assam by the latter, and was confined to frequent disputes about the possession of the 19 dwar, or passes, leading from the foot of the Bhotan hills to the plains. Some of these had been in the hands of the Assam Government, others were held jointly on highly inconvenient terms, and collisions between the officials of both States were frequent. The Bhotani, moreover, made more than one marauding expedition into the border territory, as they had been accustomed to do in days gone by. A mission was accordingly sent, in 1863, to explain the demands of the British Government, and the consequences of refusal to agree to them. The envoys were subjected to gross outrage and insult, and the consequence was the occupation of some disputed territory, and the conclusion of the required agreement. In compensation for the rights of Bhotan over the passes, the British agreed to pay a yearly subsidy of Rx. 5,000 out of the revenue of those tracts. This subsidy has on more than one occasion been withheld temporarily, in consequence of raids from the hills. The last occasion was in 1889. During the last 12 years or so there have been frequent internal disturbances, and once a collision with the Thibetan Government, but no interference by the Government of India has been thought advisable. No information regarding the area, population, or revenue of Bhotan is available.

able. The trade of the State with India, so far as it is registered, amounted, in 1891–92, to Rx. 18,489 from the hills into India, and Rx. 13,485 from India to Bhotan. NORTHERN AND EASTERN FRONTIER STATES AND TRIBES.

*Sikkim.*—Between Nipal and Bhotan is situated the small State of Sikkim, or the "New Palace," known to the inhabitants as Rong, and to Thibet as the "land of rice." Like Bhotan, it owes its political origin to a settler from Thibet, whose grandson established himself there about the middle of the 17th century. The original possessions, however, were curtailed by the Bhotani from the east, and the Nipali from the south and west, but at the end of the British collision with the Gurkha, in 1815, the acquisitions of the latter were returned to Sikkim. In 1835 the tract round Darjiling was ceded to the British, on payment of Rx. 600 annually, an allowance that was raised, as a mark of personal consideration for the Maharaja, to Rx. 900 in 1868, and to Rx. 1,200 five years later. Between 1880 and 1883 troubles arose owing to the pretensions of the son of the third wife of the Maharaja's father, who, on becoming a widow, had married again, the pretender being the issue of this second union. In order to support his title of brother to the Chief, the aspirant called in the aid of the Thibetan custom of polyandry, and had two children by the lady betrothed to his sovereign before the latter had even set eyes on her. The Maharaja thereupon declined to advance any further in the matrimonial venture, and paid too little attention to the intrigues being carried on against him from the safe distance of Thibet. On the advice of the British officer at Darjiling, he was induced to pay a ceremonial visit to Thibet in 1885, but he remained there, out of reach of further counsel, until the end of 1887. In the meanwhile, the Thibetans had occupied a portion of Sikkim territory and built a fort there, which they refused to evacuate. An expedition was accordingly undertaken by the Government of India early in 1888, which resulted in the expulsion of the invaders back to Thibet. Negotiations then began between the British and an envoy of the Chinese Government, the end of which was a Convention on the Sikkim question, under which the boundaries were settled and the protectorate of the British Government recognised. A resident political officer, subordinate to the Deputy Commissioner of Darjiling, was appointed, under whose auspices, and with the aid of a representative council of local notables, communications between the British and the Thibetan frontiers have been completed, and the State revenue placed on a satisfactory basis. The Maharaja, however, declined to take any interest in the new order of things, or to reside at his capital, and in March 1892 he secretly left the palace where he had been living for the last two years, and attempted to break through into Thibet. The Nipali authorities, however, stopped him, and after communicating with the British Government, escorted their captive to Darjiling, where he has since been detained. The opportunity afforded by these occurrences was taken to make general arrangements regarding the trade between Thibet and India. Sikkim.

The area of Sikkim is estimated at about 2,820 square miles, the population, according to an enumeration made during March and April 1891, is about 30,460, and the revenue Rx. 5,826. In 1889 it was no more than Rx. 2,034.

*Manipur.*—For the first half of the decade under review Manipur came under the head of a frontier State, but since the addition of Upper Burma and North Lushailand to the empire, it has become an *enclave* in British territory. It was colonised, in all probability, by the same Mongoloid stock that possessed Mogaung, in Upper Burma, a branch of the Kakhyin. In the early years of last century, however, the Chief embraced Hinduism, and his descendants, as in the case of Nipal, are of conspicuous orthodoxy. The repeated invasions of this State by the Burmese were the immediate causes of overtures to the British, and with the aid of the latter the independence of Manipur was recognised by the King of Ava in 1826. During the next 60 years there were frequent dynastic and palace outbreaks, as is not unusual in such circumstances. The late Raja died in 1886 and was succeeded by his son, Sir Chandra Singh. The pretenders who rose against the latter were defeated on the Kachar frontier, and deported to Chutia Nagpur, in Bengal. Next year there were two more risings, which ended in much the same way. Then followed operations, which in 1888 were finally successful, against the Kamhau and Chuksad tribes on the eastern Manipur.

NORTHERN AND EASTERN FRONTIER STATES AND TRIBES.

frontier. But within two years more trouble arose. The Raja's family was split into two factions; the first consisting of the Chief himself and his three uterine brothers; the other comprised from half-brothers led by the Senapati, or commander of the army. In September 1890 the latter made a night demonstration against the palace, and the terror-stricken Maharaja took refuge at the Residency. On the following day, contrary to the advice of the Political Agent, the Maharaja decided to abdicate, and leave the country. His three full-brothers accompanied him to the nearest British district, from which point of vantage he rescinded his determination, and requested the British Government to aid him in recovering his State. In the meanwhile, the eldest of the half-brothers had occupied the throne. The Government of India, seeing that the Maharaja was incompetent to maintain his authority over his own family, decided to recognise the occupant of the throne, but found it necessary to order the Senapati to be deported from Manipur, where his influence had been so fruitful of disturbance. The Chief Commissioner of Assam, the province to the administration of which the supervision of this State is entrusted, was directed to proceed to Manipur and communicate the recognition of the *de facto* Chief, and to carry out the instruction of the Government of India with respect to the Senapati. Mr. Quinton left Assam, accordingly, with an escort of 400 men of the Assam Gurkha Battalions, under Lieutenant Colonel Skene. The force was supported by 200 men on their way from Silchar, and the Residency escort. On arrival at Manipur the Chief Commissioner was met and saluted by the Regent, as he was officially entitled, and the Senapati. Mr. Quinton announced that a durbar, or formal meeting, would be held the same day in the Residency. As the Senapati pleaded ill-health, it was decided to postpone the meeting till the following morning. On that occasion, too, he failed to appear, on the same grounds, and the Regent admitted that he was unable to enforce his attendance. It was determined, therefore, to arrest the Senapati in his house, so, on the morning of the following day, a party was sent for the purpose. The house was found to be lined with troops, who had been summoned from the outskirts of the town for the occasion, and were well armed and provided with ammunition. The force detached by the Chief Commissioner was insufficient to dislodge them, and sharp fighting was kept up all day, the visitors being driven into the Residency precincts. In the evening an armistice was arranged, and the Chief Commissioner, with four other officers, went with a flag of truce to meet the Regent. They were taken prisoners, however, on their way to the palace, beheaded, and their bodies mutilated. The escort fought its way back to Silchar, and an expedition was at once dispatched in three columns, from Kohima, Tammu, and Silchar, to restore order and exact the unconditional submission of the Regent and his relatives, with others concerned in the affair. The capital was reached a few days over a month after the outbreak. It was found deserted, the arsenal destroyed, and the principal buildings plundered. Within another month all those concerned in the disturbances had been captured. The Senapati, and the general who was concerned in the execution of the British officers, were hanged after trial before a special Commission. A man concerned in the murder of the Superintendent of Telegraphs met the same fate. The Regent and 13 of his adherents were sentenced to transportation for life, and one of the descendants of a prominent member of the ruling family, a minor, was formally selected by the Government of India for the vacant throne. Primogeniture was laid down as the future rule of succession. Until he attains his majority the superintendence of the State is vested in an officer of the British Government. The late Maharaja, whose abdication led to the above occurrences, died in Calcutta towards the end of 1891. A tribute of Rx. 5,000 has been assessed on the State, with a fine of Rx. 25,000, recoverable in five years, as a punishment for rebellion. The area of Manipur is about 7,500 square miles. In 1881 the population was about 221,000, but the census returns for 1891 were destroyed during the evacuation of the capital. The revenue is estimated at Rx. 28,400.

The Assam Frontier Tribes.

The *Assam Frontier Tribes.*—The sub-Himalayan tracts along the Assam frontier are parcelled out amongst seven main tribes, with three of which the British connection arose out of incursions by the tribes into the plains within the Indian boundary. The Aka tribe, in its two sections, receive small

small subsidies from the Government of India, and have some tracts of land allotted to them in the plains which were demarcated in 1874–75. In 1883 a British subject visited their country with the object of collecting specimens, agricultural and ethnologic, for an exhibition that was to be held in Calcutta. He was captured and detained, and shortly afterwards a village was plundered and burnt. An expedition was sent, and one section of the Aka submitted at once, but it was not until 1888 that the other branch, "those who lurk in the cotton," ceased to maintain their hostile attitude. In the next year both received their subsidy, and matters have since remained on a peaceful footing. The next tribe is that of the Dafla, whose relations with the British Government are much on the same lines as those of the Aka. Since 1874–75 there have been no disturbances, and the tribal annual meetings pass off harmoniously. In 1883 a survey of part of their country was made, and the officer conducting it received a cordial welcome. The Miri and the Abor are related, and the Dafla, also, are probably of the same stock, though separated by the exigencies of existence in so mountainous a tract as that where they are now settled. The Miri, however, are described as a mild and peaceful race, epithets which cannot truthfully be applied to their fellows. The Abor have such a reputation for plunder and violence that the want of population in the parts of the country within their reach is attributed entirely to dread of their raids. They are now, however, under agreement with the Government of India to abstain from such interference with their neighbours, and if due forbearance be exercised in this respect they receive an annual subsidy of Rx. 331. During the decade only one breach of this understanding took place, and even then the movement was not against a tribe actually within British territory, though under protection. No actual attack was made, owing to the occupation of the master positions by a mixed force of police and military, during the time the Abor were making preparations for their raid. In a few months quiet was restored, and the posts were evacuated in 1882–83. In 1888–89 another section of the Abor had to be temporarily blockaded, in consequence of the capture and murder of four British subjects, and retribution was exacted. The only interference that has been found necessary with the Mishmi, the neighbours and hereditary enemies of the Abor, was due to precisely similar causes. This tribe, however, are not under agreement, and resort in considerable numbers to the market of Sadia for trading purposes. The blockade lasted from 1884 till the winter of 1887–88, when the tribe gave in, and paid compensation for their offence. The Khampti, or Hkamti, and the Phakial, are Shan immigrants from North Burma. The latter live entirely, the former mostly, within British territory. The Khampti receive some small subsidy from Government, and furnish a few armed men for the protection of the villages round Sadia. The Singh-pho, with their half-breeds, the Duania, are allied to the Khyin on the east, and the Naga tribes on the west and south-west. They have been settled in Assam just a century, but only a portion of the community lives within what is known as the Inner line, of British territory, that is, the sphere of administration. The rest haunt the hilly tract intervening between the Brahmaputra and the Irawadi, and most of the dealings of the British with them are conducted from the side of Burma, not from Assam. The Naga tribes, of which there are five within British territory, were given to almost annual raids on the plains up to 1866, when a permanent occupation of the outskirts of the tract was undertaken. After this step the raids became fewer, but were never entirely stopped, so the local headquarters were moved higher up, to Kohima, in 1878. A particularly violent and widespread outbreak in 1879, in which much loss of valuable life occurred, induced the Government of India to constitute Kohima a permanent military station, and to administer the whole tract as British territory. Since then matters have quieted down. Other divisions of the Nagas, however, on the border of the Sibsagar district, repeatedly violated the frontier in the course of intertribal feuds, and in 1884–85 an expedition was sent against those residing between the British districts and the Dikhu River. Ultimately it was found that in order to obtain complete control over the tribes in question it would be necessary to incorporate this tract with the adjacent district, and administer it as British territory. It now forms, therefore, the Mokokchang subdivision of the Naga Hills district of Assam.

NORTHERN AND EASTERN FRONTIER STATES AND TRIBES.

Assam.

Bordering on Assam and Bengal, to the east, lies a considerable stretch of hilly country inhabited by various tribes known collectively as Lushai, and formerly as Kuki. For many years they have been in the habit of making marauding expeditions on the villages and settlements on the plains just below their hill fastnesses, but up to 1888 the policy of the Government of India was to refrain from more interference than that called for in connection with the prevention and punishment of raids of the sort mentioned above. The tract was divided into North and South Lushai land, the former under the Assam administration, the latter under the Government of Bengal. At the end of 1888 a survey party on the Chittagong frontier was cut up by one of the tribes, and shortly afterwards a serious raid was made near Demagiri. A force of about 1,200 men with two guns was then marched to Lungleh, making a good road as it went; a stockaded post was established there, and left for the rainy season with a garrison of 200 frontier police. Before leaving the country the expedition punished the tribe engaged in the murder of the survey party. Next season operations were resumed from Lungleh, and the road was carried on towards Haka, in the Chin Hills, under Burma. In North Lushai land, too, a column was engaged in establishing an outpost, at a place called Aijal, with a subsidiary one at Changsil, the termination of the river route to Silchar. In September 1890, the surrounding tribes rose against these posts and killed the political officer left in charge. Reinforcements were pushed forward, and the surrender enforced of the chiefs concerned in the attacks upon the two posts. Another attack had been made in the meantime upon the fort between Lungleh and Haka, which was disposed of in the same way as that to the north. For more than a year no further outbreaks occurred, but in March 1892 a general rising took place. The political Agent of the Northern Division was attacked, the Superintendent of the Southern Hills was forced to stockade himself, and a tribe set out for Kachar, where it raided a tea-garden, killing 38 labourers and capturing four more. Punitive measures were speedily taken, and, on the unexpected appearance of a column from the Burma side of their hills, the Lushai made full submission. In order to bring the whole tract into order, the Government of India decided to place the northern and southern Lushai country with the Chittagong Hills under the Assam administration, following the recommendations of a Conference on the subject held early in 1892. It is expected that the transfer of the southern division and the Chittagong Hill tracts will be made during the current open season.

Burma States.

The next subdivision of the present subject treats of the organisation of the relations between the British Government and sundry Native States, that followed, for the most part, the acquisition of the kingdom of Upper Burma. In some cases these relations were well enough defined and recognised. In others, as often occurs in similar circumstances, the link between the suzerain and the rest was only just as strong as the former happened to be, at the moment, in a position to maintain. In the case of the Shan States, the relation to the Court of Ava seems to have been fairly definite. Karen-ni was at issue from time to time about its position, whilst the hill tribes, such as the Khyin and Kakhyin, whilst admitting their territorial position with regard to Burma, took every step to render this the utmost limit of the king's demand upon them, so the extent of the authority that was actually exercised over them was very shadowy. From the following account of what has taken place with regard to these different tracts, it will be seen that, on the whole, the seven years of British rule have done much to set these relations on a solid footing.

Shan States.

*The Shan States.*—These States passed under British protection at the annexation of Upper Burma, of which they formed an integral part. They fall into three territorial groups: first, those west of the Irawadi; secondly, the cis-Salwin group; and lastly, the trans-Salwin States. Of the first group, the two largest States have been incorporated into the surrounding British districts, owing to the rebellion and intrigues of the Saubwa, or local chiefs. The Wuntho chief from the first manifested his disinclination to acquiesce in the new State of affairs, and after having been brought into nominal submission in 1886–87, broke out again early in 1891. Active measures were resumed, with the result that the chief and his father sought refuge

refuge amongst the Kakhyin tribes, and Wuntho became British territory. Much the same thing happened to the State of Kalé, though there was no active hostility against the British, but rather against the chief, who, in consequence of internal dissension, had been placed in power by that Government. The ex-Saubwa, having repeatedly violated the conditions on which he had received British protection, finally surrendered, and lives on his pension in Mandalay. His successor was found to be implicated in the Wuntho rebellion and other intrigues, and he was deported accordingly to Rangoon, and the State incorporated in the Upper Khyindwin district. The three other States in this group are comparatively small. Two of them, Hsaunghsup and Hkamti-Singaling, are situated on the Khyindwin river; the third near the head-waters of the western branch of the Irawadi. They have peacefully and willingly entered into the British system of tributaries. Between the Irawadi and the Salwin lie 44 States. At the time of the annexation of Upper Burma the Chiefs were engaged in one of several attempts to throw off the yoke of Mandalay. Some of them had retired across the Salwin, and from thence invited one of the Burma ruling family to assume sovereignty over a sort of confederation of their dominions, independent of his relatives. During the year 1886 a considerable number of the States in question were under this coalition. In the early part of 1887 a British force entered the tract, and the allies speedily dissolved the confederacy and tendered submission. With the exception of two, they have been placed under the superintendence of British agents, one at Fort Stedman, the other at Lashio. With the exception of one State, where there was one of the not unusual displacements of a Chief by one of his relatives, affairs have been quiet since the above arrangement was made. Across the Salwin there are 10 States, to five of which the Siamese advanced claims. The matter was investigated and it was found the claim could not be admitted. A special Commission afterwards settled the boundaries between the British and Siamese territories in this direction. The final decision as to the political status of these chiefs has not yet been passed. The largest of the other trans-Salwin States, Kyaington, with its dependencies, has been decided to be not included in British India, so it is dealt with as if in subordinate alliance, and the Chief has been confirmed in his rights under a special form of deed, but it is reported that he has not got his frontiers under satisfactory control.

NORTHERN AND EASTERN FRONTIER STATES AND TRIBES.

*Karen-ni.*—The country of the so-called Red Karens lies between the Salwin and the Shan States, on the north and east, and Burma on the south and west. It is divided into east and west Karen-ni, and in each section, though there are numerous petty Chieftains, one Chief is acknowledged to be the local superior. The independence of this tract has been continually threatened by the rulers of Burma, and it was not until 1875 that the latter formally abandoned their claims to sovereignty over the western portion. As to the eastern, there had been no doubt acts of allegiance on the part of the Chief, but they were never recognised by the British, who consistently regarded the whole tract as independent. In 1888, however, the Chief of the eastern division attacked the Shan States on his frontier, and an expedition had to be sent to occupy his capital, He was subsequently deposed in favour of his nephew, who, like the Chief of the western division of the tract, is now by agreements passed in 1890 and 1892 respectively, recognised and confirmed as tributary of the British Empire. It may be mentioned that during the expedition of 1888–89 the Siamese Government was asked to help in preventing the escape of the fugitive Chief across the Salwin, and advantage was taken of the intervention to occupy a tract east of that river, but subject to the Karen-ni. Next year a Commission was sent to inquire into the claim of the new Chief to this territory, and though the Siamese, at whose instance the investigation was held, declined to take part in the proceedings, the boundary then laid down was subsequently accepted by that Government.

Karen-ni.

Burmese Frontier Tribes.

## BURMESE FRONTIER TRIBES.

Khyin (Chins).

*The Khyin* (*Chins*).—The Chins come into the category of frontier tribes only with reference to the plain-tracts of Burma, since the hill-country, in which they live, and from which they derive their Burmese appellation, lies well within the political limits of the British Empire. They are divided into several large tribes, of which the more important are the Tashon, Kanhau, Siyin, Haka, Yokwa, and Chinbok. Most of them have been engaged at some time or other in raids on the adjacent villages in the plains, and punitive measures had to be taken against the Siyin and Kanhau in 1888–89, and in the following year against the Tashon, Yokwa, and Haka. The Chinbok were not similarly visited till the year after. British garrisons were established at two points in the first instance, Fort White and Haka, but in 1890–91 a third centre of operations was found advisable, and Yaudwin was selected for the control of the southern tribes, amongst whom the Chinbok were severely punished for their raids. In 1891–92 operations on a far larger scale and on a carefully prepared scheme were undertaken. Two columns left Fort White. The first explored all the country to the north, between their base and Manipur, and then advanced into the Nwengal country, on the Lushai border. The second column, which was intended for this latter task, was diverted into the North Lushai tract, and, on its return, was sent on to Lungleh, in the south, where there had been serious trouble with the Lushai tribes of that division. In addition to the work of exploration, pacification, and punishment, some excellent roads were completed by a regiment of Madras Pioneers. From Haka, three columns were despatched during 1891–92. The Baungshe detachment visited the whole of the country within their assigned beat with only one hostile experience. The Tlantang column was equally successful in their operations, and the Tashons, for whose subjugation an unusually large force was allowed, as the rest of the Chin tribes considered this tribe to be on a par in strength with the British, after failing to achieve a general coalition, made friendly overtures, and submitted peacefully to the establishment of a temporary post in their chief village. The Yaudwin expedition, too, was a short and peaceful one. New ground was explored, tribute collected, and collision avoided. A scheme is now under consideration for combining the administration of the Chin Hills into one centre, under the control of an Agent at Falam, the place occupied in the Tashon tract, with assistants at Fort White, Haka, and other places, as necessary.

Kakhyin (Kachins).

*The Kakhyin* (*Kachins*). The Kachin country has been described as lying in the mountain tract that defines the valley of the Irawadi north of Hotha, and in the adjacent hills as far as the Hkamti plains on the north. But there are many tribes of cognate race on both sides of these limits. Of the country itself little was known north of the Taping River, until 1890–91, when an exploring expedition was undertaken by British officers from Burma. It was reported in that year that the ex-Saubwa of Wuntho, who was mentioned in connection with the Shan States above, was stirring up the Kachin tribes to make raids on British territory. Two columns, therefore, were despatched by different routes into the Mogaung and Indaugyi country, and though they just missed capturing the fugitive after the only engagement that took place, his power was broken and he himself driven, it is believed, across the Chinese frontier. Two other columns operated in this tract during the season, visiting the Hukong and Kaukkwe valleys respectively. The object was mainly to give the inhabitants to exactly understand their position with reference to the British Government, and but little resistance was met with in the progress of the latter column, and in that of the former none at all. It is worth noting that on this expedition a column from Assam joined that from Burma in this hitherto little known region. Other columns were detached on service in the north of Katha and in the south of the Bhamo districts, chiefly to collect tribute, obtain possession of guns from the tribes that had made raids on the surrounding districts, and generally to carry out the policy of pacification of these unruly tracts that had been adopted as the main principle of the operations as a whole. In the case of the former column only was any resistance

resistance offered, and even then it was slight and purely local in character. In the case of the little known country to the east of the Irawadi more difficulty was experienced. Ever since 1886 the tribes of this tract had been giving trouble to the bordering villages, as they not only indulged in the exercise of their own predatory inclinations of comparatively restricted scope, but their hills served as cover for the bad characters of both sides of the frontier, British and Chinese. Trade between Burma and Yunnan by this route was thus interrupted, and smuggling of arms, liquor, and opium was freely carried on. It was determined, accordingly, to reduce the tribes in question to the same position as their fellows to the west of the great river, that is, to constitute them tributaries of the British Government, with the guarantee of a special agreement with their respective Chiefs. In consideration of the importance of the traffic duties to the revenue of these little States, these levies were sanctioned, though under stated rules and on fixed scales or tariff. In pursuance of this policy, a post was established in 1892 near Namkham, to supervise the neighbourhood of the trade route to Bhamo from that part of Yunnan, and to protect the Northern Shan States from incursions. Operations against sundry large bands of frontier dacoits were also found necessary, and these were in progress up to the end of the period under review. On the frontier between the Taping and the Nantabet, an outpost was established at the end of 1891, in consequence of the advance of a Chinese force to a point west of the Nampaung, and therefore within the British limits. The Chinese retreated beyond the river, and trade resumed its course. Early in 1892 a force from Myothit was visiting the frontier between that place and the Nantabet, when news was received of the rising of the tribes round the outpost of Sadon, which had been strengthened and garrisoned temporarily early in the year. On relieving the garrison in question the column marched back, and satisfactorily completed its task of collecting or licensing guns as circumstances dictated, and of imposing the light tribute which is considered enough to mark the relations that are henceforth to subsist between the tribes and the British Government. Finally, the Irawadi column, a detachment of which was left at Sadon, as above mentioned, was successful against a league of petty Chiefs banded together for the purpose of smuggling between Burma and China, and subdued also a hostile Saubwa, who resisted the passage of the expedition beyond the Nmaikha. The small garrison at Sadon was strenuously attacked by about 700 Kachins between the 7th and the 20th February, when it was relieved by the column from Kazu. In recognition of the successful resistance offered by the officer left in command, the post has been named Fort Harrison. The country round was quieted before the main body of the expeditionary force withdrew.

BURMESE FRONTIER TRIBES.

The above occurrences have been mentioned in some detail as giving the best idea that can be conveyed in a mere narrative of the difficulties that attend the pacification of a wild and almost inaccessible hill and valley frontier.

On the Siam and Burma frontier there occurred little that requires mention in this review. The state of affairs at Khieng-mai or Zimme, where the authority of the Siamese Government over the local Chief was repeatedly set at naught, necessitated the supplementing of the Treaty of 1855 by a second, which was concluded in 1884, and provision was made for the appointment of a British Vice-Consul on the spot. This officer, who took up his duties in April 1884, has jurisdiction in cases in which British subjects are concerned, and also with regard to the passage of such persons through Siamese territory, and in dealings connected with the exploitation of the valuable forests in the Khieng-mai State and the surrounding petty chieftainships.

## INTERNAL STATES.

Haidrabad.

| | |
|---|---|
| Area in square miles - - - | 82,698 |
| Population (1881) - - - | 9,845,594 |
| ,, (1891) - - - | 11,537,040 |
| Gross Revenue[a] (1882) - - | Rx. 3,000,000 |
| ,, ,, (1891) - - | Rx. 3,000,000 |

Military force about 10,000 regular, and 20,000 irregulars.

[a] Exclusive of the private estates of H. H. The Nizam, his relatives, and chief courtiers.

Of the protected States within India itself that do not touch the frontier, the largest is that of *Haidrabad*, in the Deccan. This was founded early in the 18th century by Asaf Jah, one of the military nobles of the court of Aurangzib. Not long after his appointment by the Emperor to the position of Nizam ul Mulk, and Subadar of the Deccan, this officer found himself strong enough to throw off the control of the Court of Delhi, and to assume what was practically entire independence, whilst maintaining the fiction of the suzerainty of the Emperor. For many years after his death in 1748, the history of this State is inextricably connected with that of the contest between the British and the French for the chief place in Peninsular India. The latter were first in the field at the court of the Deccan, but owing to reasons which are too well known to need quotation here, the Nizam found it advisable to lean on the protection of their rivals in the various struggles of which Southern India was then the scene. The wisdom of the choice was justified on the conclusion of the wars with Mysore and the Marathas, respectively, but on several occasions subsequent to the latter event, intervention in the internal administration of the State was found necessary, in consequence, usually, of the weakness and neglect of those in power. On one occasion, the payments made by the British Government on account of territory ceded in what are historically known as the Northern Circars, had to be capitalised to liquidate urgent claims on the Nizam's treasury. On another, the pay of the military contingent which the State was bound to keep up under its agreement with that Government was so in arrears that a cession of territory had to be proposed. This expedient, however, was staved off for a time by a prompt payment of a portion of the debt, but looking to the irregularity of the arrangements and the inefficiency of the troops the relations of the two contracting parties were put on a more satisfactory basis in 1853. Finally, it was agreed that the British should maintain an auxiliary force, now known as the Haidrabad Contingent, and pay all expenses connected therewith, as well as the interest on former loans or advances, out of the revenues of Berar, a tract which was placed under their administration, on the understanding that the surplus revenue should be paid over to the Chief's treasury. This arrangement is still in force. The present chief, His Highness Mir Mahbub Ali Khan, succeeded his father at the age of three, and was invested with full powers of administration by His Excellency the Viceroy, in February 1884. Amongst the chief events during the decade must be mentioned the death of the well-known minister Sir Salar Jang, in February 1883, and in 1889, of his son, who had succeeded him at the request of the young Nizam. The State railway system has been much extended, and attempts have been made to utilise what are said to be the considerable mineral resources of the north-eastern part of the State. The internal administration has been subjected to many changes since the towering personality of Sir Salar Jang was removed. The loyalty and good feeling of the young Chief towards the British Government were conspicuously manifested in the spontaneous offer of his treasure and his sword in the defence of the Indian frontier against foreign invasion. The incidents that have excited most public interest in the last few years may be said to be more picturesque than politically important, and carry conviction to the western mind that much of what is written in the "Arabian Nights" is not devoid of probability. Though a Musalman State, people of that faith form only 9·87 per cent. of the population, thus more than compensating for the subordination of their creed in Kashmer.

*Mysore.*

*Mysore.*—The second State in the Deccan owes its origin to two brothers, who, from small beginnings early in the fifteenth century, carved out, in the succeeding 200 years, a considerable slice from the neighbouring decrepit kingdoms of the Deccan. Then came the failure of direct heirs, so frequent and fatal in Indian dynasties, and after a few years of military rule, the power fell into the hands of one of the Musalman adventurers who had joined the local army. The forty years' rule of Haidar Ali and his son Tipu are matters of history. At their fall the British Government reinstated the former family, and under the judicious management of the Minister, Purnaiya, one of the few names that stand out in the annals of Native administration, the State was restored to peace and financial prosperity. This, however, did not last long, and on the retirement of Purnaiya, the Chief entered upon a course of misgovernment which ultimately drove his subjects to rebellion. The intervention of the Paramount Power was inevitable, and there was no alternative but to take action under the treaty of restoration, and assume the direct administration of the State. After nearly 50 years of British rule, Mysore was again restored to the representative of the family of its founder, the adopted son of the late Chief, who in 1881 was formerly installed. Since then, as in Haidrabad, progress has been made with mining and railway extension, and the State is now connected with both Madras and Bombay. The administration is conducted on the same lines, and largely by the same officers, as before the rendition. Amongst other innovations worthy of note is the establishment of an annual consultative meeting of representatives of various classes, nominated at first by the local State officials but afterwards elected on property or educational qualification, in whose presence the minister reads the budget and the review of the past year's administration. Local grievances are then mentioned to him, but there appears to be little or no discussion allowed, so the rate at which the business before the assembly is disposed of, though probably a "record," in point of speed, is not surprising. The census shows that the country has recovered from the disastrous effect of the great famine of 1877, and the development of mining enterprise is a marked feature of the present régime. At the accession of the Chief, the Civil and Military Station of Bangalore was made over to the management of the British Government, together with the jurisdiction over this tract, and the subsidy from the State was raised from Rx. 250,000 to Rx. 350,000, but the demand for the enhancement has been postponed.

Mysore.

| | |
|---|---|
| Area in square miles - - - | 27,936 |
| Population, 1881 - - - | 4,186,188 |
| ,, 1891 - - - | 4,943,604 |
| Gross Revenue, 1882 - - - | Rx. 1,201,970 |
| ,, ,, 1891 - - - | Rx. 1,491,903 |

Military force, 1,180 cavalry; 2,250 infantry; 10 guns, and 25 artillerymen. Tribute, Rx. 250,000.

*Baroda.*—This remnant of the Maratha power in the Gujarath division of the Bombay Presidency consists of several tracts isolated amongst British territory, as in the south and centre, or surrounded by other and smaller States, chiefly under ruling families of a more northern origin. According to the last census, the population of about 2,415,000, contained but 19,000 of the ruling tribe, thus following in the track of Kashmer and Haidrabad. The division lying to the north-west of British territory in Gujarath is the most populous, and returns over a million inhabitants. The outlying possessions of the State in the peninsula of Kathiawar contain but 180,000. The rest are found in the continental portion of Gujarath, round the chief town, which contains a population of 116,000, and further to the south. The founder of the State was the favourite adherent of one of the highest of the military leaders of the Marathas, who had established himself in Gujarath as the collector of tribute on behalf of the Poona Court. In the course of time, the Chief was succeeded by a weak representative, whilst the subordinate post fell to a strong character, with the result to be expected in those days, of the disappearance of the former in favour of the other. The Dabhade went back to the Deccan, whilst the Gaikwar assumed power in Gujarath. The tribute which the latter imposed upon the weaker chieftains of that province was somewhat arbitrary; but when the British obtained the upper hand, the Gaikwar was confirmed in certain claims which were to be realised by the former. He was to maintain, also, a certain irregular force of

Baroda.

| | |
|---|---|
| Area in square miles - - - | 8,226 |
| Population, 1881 - - - | 2,185,005 |
| ,, 1891 - - - | 2,415,396 |
| Gross Revenue, 1882 - - - | Rx. 1,326,268 |
| ,, ,, 1891 - - - | Rx. 1,335,090 |

Military force, 3,531 cavalry; 4,988 infantry; 47 guns, and 93 artillerymen. Tribute, Rx. 37,500.

INTERNAL STATES. (*Baroda*)

of 3,000 cavalry, for police work in the tributary territory. This provision was abrogated in 1881, and an annual payment of Rx. 37,500 substituted. A local levy took the place of the former semi-police force. The maladministration of Malharrao, who succeeded his brother in 1870, rendered the interference of the Government of India inevitable. A grave warning had no effect. The Gaikwar married his concubine, who five months after the ceremony produced a son, whom the Chief wished to make his heir. The mercenaries, who had often been a thorn in the side of the State, began to show signs of disaffection on account of the withholding of their pay, and everything pointed to the proximity of a crisis. Shortly afterwards, the Chief was charged with complicity in, if not the instigation of, an attempt to poison the Resident. An inquiry was held into this specific matter, whilst a general overhauling of the administration took place independently of it. The members of the Commission disagreed in their opinion, and the Government of India, accordingly, did not proceed further in the matter of the criminal charge, but the results of the coincident investigation showed that Malharrao was quite unfit to continue at the head of the State. He was therefore deported, and the present chief, Sayajirao, a collateral relative, was adopted under the sanction of the Government of India, by the widow of Khanderrao, the penultimate Gaikwar, in consideration of the loyalty he had shown during the disturbed times of 1857. The ex-chief died at Madras in 1882. The son of his concubine, mentioned above, had died beforehand, and his widows were settled in Baroda territory on a State pension. The political control of Baroda, which had been hitherto exercised by the Bombay Government, was transferred after the above occurrences to the Government of India. During the minority, and since the accession to power of the present Chief, the administration of the State has been thoroughly re-organised. The cultivable area has been surveyed and assessed, new railways have been made, and the former line extended. Much, too, has been done for education. On more than one occasion the chief has visited England, and ill-health has compelled him to spend a good deal of time away from the cares of state, in visiting different parts of India. Interwoven as this State is with British districts and other Native States, questions of considerable complexity in connection with extradition, excise, the maintenance of boundary-marks, the realisation of revenue from inhabitants of frontier villages and the like, must necessarily arise, so that the efficiency of the administration is to a peculiar degree a matter of concern outside the limits of the State itself; and during the decade there has been much improvement in this respect, and also in the attitude of the Chief towards measures suggested for mutual convenience by the British Government.

Agencies and the smaller States.

In the case of the four States of Haidrabad, Baroda, Mysore, and Kashmer, the relations with the Paramount Power are conducted through an officer appointed to each, communicating immediately with the Government of India. Elsewhere, there are two intermediaries. The Agent or Resident, as the case may be, is subordinate either to an Agent to the Governor General, as in Rajputana, Central India, or Balochistan, or to the local Government or Administration, as in the case of the Bombay, Panjab, Madras, Bengal, and North-west Province States, and those connected with Assam, Burma, and the Central Provinces.

Rajputana

*Rajputana.*—First of these collections of States comes Rajputana, with an Agent to the Governor General, having his head-quarters at Mt. Abu, in the Aravalli hills. The 20 States which he superintends are again grouped into nine subordinate charges, three of which are Residencies, and the six others Agencies. The following statement gives the names of these States, with their area, population, and a few other details of interest. The revenue, however, is not always to be taken as correctly returned, though in the cases where the State in question is temporarily under direct administration, as in Jhalawar, Kotah, and Bikaner, there is probably little, if any, error.

| STATE. | Area in Square Miles. | Population. 1891. | Population. Increase per cent. since 1881. | Estimated Revenue. 1882–83. | Estimated Revenue. 1891–92. | Tribute. | Approximate Military Force. | Serviceable Guns. |
|---|---|---|---|---|---|---|---|---|
| | | | | *Rx.* | *Rx.* | *Rx.* | | |
| Udaipur (Mewar) | 12,861 | 1,862,478 | 18·48 | 240,000 | 259,630 | 20,000 | 21,074 | 257 |
| Dungarpur | 1,440 | 165,400 | 13·90 | 15,800 | 17,640 | 2,739 | 792 | 2 |
| Banswara, &c. | 1,937 | 212,269 | 44·93 | [illegible] | 20,400 | 3,239 | 1,120 | 4 |
| Pratapgarh | 959 | 87,975 | 10·94 | [illegible] | 19,240 | 5,689 | 794 | 2 |
| Jaipur | 15,349 | 2,832,276 | 11·75 | 495,870 | 619,130 | 40,000 | 20,193 | 281 |
| Kishangarh | 874 | 125,516 | 11·43 | 27,500 | 34,590 | – | 2,581 | 51 |
| Lawa | 19 | 3,360 | 25·27 | [illegible] | 1,280 | 22 | – | – |
| Jodhpur (Marwar) | 37,445 | 2,521,727 | 44·06 | 325,320 | 430,000 | 21,300 | 7,071 | 75 |
| Jesalmer | 16,039 | 115,701 | 6·95 | 11,850 | 15,600 | – | 507 | 17 |
| Sirohi | 1,966 | 188,977 | 30·24 | 14,920 | 25,800 | 688 | 641 | – |
| Bikaner | 23,090 | 831,955 | 63·44 | 120,000 | 199,770 | – | 1,329 | 58 |
| Bundi | 2,225 | 295,675 | 16·08 | 62,800 | 68,190 | 12,000 | 2,433 | 129 |
| Tonk | 1,415* | 198,934* | 16·89 | 118,490 | 153,900 | – | 2,890 | 77 |
| Shahpura | 406 | 63,646 | 22·98 | 19,630 | 28,600 | 1,000 | 529 | 42 |
| Bharatpur | 1,961 | 640,303 | *0·82* | 277,820 | 271,790 | – | 10,152 | 12 |
| Dholpur | 1,156 | 279,890 | 12·10 | 90,300 | 95,900 | – | 1,852 | 17 |
| Karauli | 1,229 | 156,587 | 5·32 | 48,380 | 52,650 | – | 2,083 | 10 |
| Alwar, &c. | 3,051 | 767,786 | 12·42 | 241,540 | 282,020 | – | 6,308 | 272 |
| Kotah | 3,803 | 526,267 | 1·73 | 249,720 | 235,280 | 38,472 | 7,000 | 95 |
| Jhalawar | 3,043 | 343,601 | 0·91 | 166,430 | 151,460 | 8,000 | 4,532 | 84 |
| TOTAL | 130,268 | 12,220,323 | 20·22 | — | 2,982,870 | 153,149 | 93,881 | 1,485 |

* Excluding the Tonk pergunnas in Central India.

Rajasthan or Rajputana.

*Rajasthan*, or *Rajputana*, is the home of princes, as its name denotes, and owes this distinction more to its adaptability for defence than to its fertility, climate, or other natural advantages. Protected by the desert on the north and west, and by the Vindhia and Aravalli Hills and forests to the south, it was selected as a place of refuge by the descendants of the Aryan colonies between the Jamna and the Ganges, with which tract alone communication was comparatively easy. It thus contains nearly all that is left of the Hindu chivalry of the heroic days, and in few, if any, other parts of the world can there be found a dynasty which, like that of Mewar, can trace its descent, by unbroken tradition, from the year A.D. 144. But it must be admitted that this family stands alone in this respect, for though the blood of the rest of the Chiefs is no doubt that of the Rajputs of the Epics, in spite of the traditional obliteration of that class by the Brahmans, the States over which they now rule are of relatively modern constitution. Before proceeding therefore to the consideration of the events of the decade under review, it is advisable to prefix a short historical notice of the main sections of this important group of States. In the first place, of the 20 items in the above table, there are three that are not under Rajputs. One appertains to a Musalman line; the two others are ruled by Jats, a tribe that is better known in the present day in the Panjab than in other parts of India, for it there furnishes the larger portion of the Sikh community, and its name is even used in some tracts to denote a cultivator of any kind or caste. The rest belong to various clans of the Kshatria class of Hindus, headed by the Maharana of Udaipur, or Mewar. His position may be illustrated by the following facts: On the invasion of the Musalmans from the north-west, part of Rajputana was overrun by the foreigners, and reduced to subordination. To strengthen his position, the Moghal Emperor, like Napoleon, desired to unite himself to the ancient families in possession, and so entered into alliances with the daughters of the Rajput Chiefs. Out of the latter, Mewar alone persisted in refusing the dubious honour, and in after years made this resistance a ground for declining to intermarry with his brethren of weaker knee, unless they formally agreed that the offspring of the match should inherit the throne, irrespective of the rights, on other considerations, of any one else of the descendants. It is not difficult to imagine the fratricidal incidents to which such a prescription would give rise in the never very close allegiance which the relatives of the Chief acknowledged to him. So loose a bond, whether between Chief and feudatory, or State and State, offered no serious obstacle to the operations of a power like that of the Maratha, nor even to the organised marauding expeditions of the Pendhari, who broke out unchecked when the Maratha hand was withdrawn from Central India. The intervention of the British

INTERNAL STATES. (*Rajputana.*)

Government became necessary, and most of the engagements entered into by the chiefs of Rajputana date from about this period. Jesalmer and Bikaner were probably the only States that escaped the visitation of the Maratha, an immunity which they owed to their desert frontier, a natural protection which enjoys, even to the present day, its reputation for inviolability. The danger against which they wished to provide through British aid was the encroachment of their neighbours. This aid was gradually extended from the early years of the present century till the fall of the Sindh dynasty, in the one case, and that of the Maratha, in the other.

*States in the Mewar Residency.*—The premier State in Rajputana, Udaipur, or Mewar, is by no means the largest in area, population, or revenue. The three other States that share the attention of the Resident, Dungarpur, Banswara, and Pratapgarh, are offshoots from it. At the time the British first entered into the general scheme of alliances for the suppression of the Pendhari marauders, Mewar was found to be reduced to the utmost extremities, and within measurable distance of the disruption by its feudatories of the territory that Sindhia and Holkar had left. The authority of the Chief was placed again on its proper footing, and under the supervision of Colonel Tod, the well-known historian of Rajasthan, the revenue was raised in three years from Rx. 44,122 to Rx. 87,763. But within a very short time after the restoration of the reins of government to the Chief, matters again fell back, and from time to time the British Government had to interfere in the interests of the State with the conduct of affairs. For many years, however, things have been quiet, save for an occasional outbreak amongst the Bhils, a wild tribe that inhabits the hill tracts to the south and west of the State. The Bhils acknowledge allegiance of a sort to the Chief of Mewar, but they have prescriptive rights of an extensive character, and exemption from land revenue is one of them. To keep them in order, and prevent their interference with trade through their country, a local corps was organised, towards the payment of which the Chief made over the administration of the villages he possessed in Merwara to the Government of India, on the understanding that the surplus revenue should be paid into his treasury, and that his rights of sovereignty should not be prejudiced by the arrangement. The scheme has had the desired effect of stopping the outbreaks of the Bhils, though the relations between them and the Udaipur officials are by no means on a pleasant footing. In 1884, the late Maharana died, and, as he had no son, the widows and chief nobles selected for the vacancy the present Maharana, whose father had been adopted into a branch of the ruling family. It is a sign of the times that instead of distributing amongst Brahmans the Rx. 20,000 set apart for funeral largess, it was decided to expend that sum in building schools and dispensaries to commemorate the deceased Chief. Again, in 1887, in honour of the Jubilee of the Queen-Empress, the present Chief issued an order abolishing transit duties throughout his State. There is little to relate about the minor States in this Residency. The chief of Banswara has acquired a name for lax financial administration, and was warned in 1890–91 to set his affairs in better train, but without much effect. Dungarpur, too, was reported to be averse from moving with the times, but the wild character of these tracts and of much of their population, with the small resources of the States, make it necessary to judge the administration very leniently.

*Western States Residency.*—The principal State in this charge is that of Jodhpur or Marwar, founded in A.D. 1459, by one of the Rathor clan. It is remarkable that whilst the Mewar charge is all under Chiefs related to each other by clanship, none of the three in the west of Rajputana are of the same clan. Sirohi is under the Chauhan, and Jesalmer under the Bhatti clan. Jodhpur suffered much both from its neighbours and from the Pendhari leader, Amir Khan, who was called in by the then chief. The Marathas also levied a tribute from it of Rx. 600,000, and deprived it of Ajmer. A treaty with the British was executed in 1818, whereby the Chief was bound to furnish a cavalry force and to pay the tribute due in former years to Sindhia. The former provision did not work well, so it was replaced by an annual payment for what is now the Erinpura irregular force. In 1868 the disputes between the Chief and his subordinate, or feudal

feudal, chieftains became so acute that the Government of India were obliged to make an arrangement for placing the administration in the hands of a council through whom, and with the advice of the Resident, the matters in issue were settled. The present Chief succeeded his father in 1873, and since then there has been no disturbance. The internal affairs of the State have been placed on a good footing; postal lines have been established to outlying tracts and the judicial powers of the principal estate-holders were defined and regulated by mutual agreement in 1884. A State Council was established in 1889, to which four of the leading sub-chieftains were nominated. The chief town was connected with the through line of rail in 1880, and a branch was opened at the end of 1891 to the capital of the adjacent State of Bikaner. The whole of this tract lies within the zone of light and often deficient rainfall, and during the decade on several occasions there has been a scarcity of fodder and water. Relief works were opened in 1891–92, but it seems that the people affected are so accustomed to migrate in such circumstances that large numbers managed to support both themselves and their herds by going eastwards for the season, and indenting upon the States in that direction for grazing and harvest work. Jesalmer is one of the few States in Rajputana that escaped a Maratha invasion. It was deprived, however, of a portion of its territory by Sindh, and on the occupation of the latter country by the British the tract in question was restored. The late Chief died in 1891, and during the minority of the son adopted by his widows, the administration is being conducted by the Resident as superintendent, with the aid of a minister and council. The small State of Sirohi contains the headquarters of the Agency on Mount Abu. Its political connection with the British Government began, as in so many other cases, by an application for protection against one of his more powerful neighbours. Half the annual tribute then settled was remitted to one of the successors to the State, in consideration of his loyalty during the Mutiny of 1857. In 1889 his son, who succeeded him in 1875, received an accession to his title, as a hereditary distinction.

INTERNAL STATES. (*Rajputana.*)

*Bikaner.*—This semi-desert State was founded about the end of the fifteenth century, by a scion of the Rathor house of Jodhpur. By one of the curious coincidences that are found in the history of Rajasthan, it was against the parent State that the Bikaner Chief applied to the British for protection when he first entered into communication with that government. He received an accession of territory from the Government of India as a reward for co-operation against the mutineers and for sheltering European fugitives from across the frontier. The late Chief behaved with injustice and severity towards the larger estate-holders under his rule till in 1883 an attempt to raise the money payment taken from them in lieu of service caused them to go out in open revolt. Finally, a small British force had to be marched against them, and a resident representative of the Government of India was appointed to see that no further outbreak took place, and that the grievances complained of were investigated and removed. In 1887 that Chief died, and his only brother, whom he had adopted, was placed on the throne. As the latter was only seven years old the administration is being conducted by a council, of which the Agent is president, whilst the young Chief is under instruction at the Mayo College at Ajmer. This State is reported to breed the best camels in India, and a corps 500 strong, with riders and equipment, is contributed by the Chief to the Imperial force of which mention has been made above. It has the distinction of being the only corps of its kind in the Empire.

*The Jaipur Residency.*—This charge includes three States, one of which, Lawa, was only recognised as independent of its parent in 1867. The next dates from the end of the 16th century, when it was confirmed in the possession of a younger branch of the Jodhpur family, then high in favour at the court of Agra. Jaipur, the eponymous State, is the largest in population and revenue of any in Rajputana. It was founded in the first half of the 12th century by the Kachwaha clan of Rajputs hailing originally from Ajodhia. In the time of the Moghal Empire this State furnished both princesses and military leaders to the Musalman power, and on the former account lowered its rank in the eye of Mewar, in the same way as Marwar had done. The capital city, which is one of the most picturesque

INTERNAL STATES. (*Rajputana.*)

in India, was founded by Jai Singh II., the celebrated astronomer, about the end of the 17th century. Within the reigns of the last two Chiefs it has been adorned with parks, museums, and schools, to an extent that makes it the show place of Rajputana. The encroachments of the Marathas in the first instance, and afterwards those of the Pendhari, brought the State into the sphere of British policy in Upper India, and the protection of the Government of India was extended to Jaipur in 1818. The first result of the support was the settlement of the questions outstanding between the Chief and his feudatories, as had been the case in Udaipur on a similar occasion. The intervention of the Government of India became necessary on two subsequent occasions between the above year and 1835, when the late Chief was placed on the throne at the age of two, under British supervision, with a Council of regency. The intelligence and energy of the Chief on his accession to full administrative power were soon manifested in the execution of a scheme of roads, schools, and other improvements throughout his State. For his services at the time of the Mutiny he received a grant of land from the Government of India, and some few years later his personal salute was increased by a few guns in recognition of his liberality in relief of distress during the great famine in Rajputana in 1868. On his death in 1880, he was succeeded by a relative nominated just before his decease. The progress initiated by the late Chief has been continued by his successor, and though there are no striking events to record during the last 10 years, the State still keeps ahead of the rest in material prosperity and in the maintenance of a high standard of Indian art. Kishengarh, the offshoot of Marwar, came under British protection at about the same time as its larger neighbour Jaipur. The Chief was involved in continual disputes with his feudatories, who were getting the better in the struggle, and within a few years a regency had to be proposed on his behalf, but after further troubles the Chief preferred abdication in favour of his son. Matters remained quiet till 1873, when the principal feudatory, the Thakur of Fatehgarh, again asserted his independence, but submitted on the receipt of formal warning from the Government of India that his claim would not be allowed. The small chieftainship of Lawa was tributary to the Pendhari State of Tonk until 1867, when on the murder of the Chief at the instigation of his suzerain it was declared independent. The Chief is of the family of Jaipur. He does not enjoy full powers in civil or criminal matters, and the residuary jurisdiction is vested in the Resident at Jaipur.

*The Eastern States Agency.*—This charge comprises the two Jat States of Bharatpur and Dholpur, with the Rajput State of Karauli, the Chief of which is the head of the Jadu clan, and therefore descended from Krishna, whose name is closely connected with Mathura and its neighbourhood. The Jat tribe seems to have migrated in the shape of marauding communities from the west of the Punjab and north Sindh. One of their Chiefs attained some notoriety during the early years of the 18th century, and received the grant of a village near Dig, which in the troubled times that followed the death of Aurangzib was expanded into the present State. The territory comprised within it, however, was first of all occupied, and then enlarged by Sindhia, who received help through the medium of his general, M. Perron, from the then chief. In the course of the Maratha war of 1803 the defence of Bharatpur was one of the most renowned incidents, though the fort had to be surrendered, and Holkar, who had taken refuge there, was, by agreement, sent out of the Bharatpur territories. In 1826 the fort was stormed and dismantled in the course of a war of succession in which the aid of the British had been invoked by the rightful heir. The present Chief succeeded in 1853, as a minor. In 1886 the chieftains of a village or two rose against him, and he had to employ the State troops to reduce them to submission, his action being held by the Government of India to have been justified by the circumstances of the resistance. Dholpur, formerly known as Gohad, rose under the auspices of the Marathas, and after the defeat of that power at Panipat, the Chief rebelled and took possession of Gwalior. He was ousted by Sindhia after the peace of Salbai, and at the settlement of 1806 the river Chambal was recognised as the southern limits of his territory. The present Chief succeeded his grandfather in 1873, as a minor, and was invested with full powers of administration

administration in 1883. He is somewhat of an absentee, and the finances of his State, owing to his personal extravagance, are in an unsatisfactory condition. He is one of the finest riders in India, and an enthusiastic hog-hunter. Karauli was made tributary to the Marathas on the advance of that power towards Delhi, and thus fell in 1817 to the British Government, by whom the State was taken under protection. Beyond a few internal disputes, in which the Government of India acted as mediator, nothing of importance has happened in this State since the above settlement. The Chief received a remission of the debt then owing by him to the Government of India in consideration of his services in 1857, with an increase in his salute, the honour most prized by a Chief of any that the Paramount Power can confer. In 1881 his successor had brought the State into financial difficulties, so that his authority was transferred to a Council under the control of the Political Agent. This arrangement was continued after the death of the Chief until 1887, when the present occupant of the throne was granted increased powers. As the State debts were cleared off in 1889, full powers were then conferred on him.

*Alwar.*—This State was carved out of Jaipur and Bharatpur during the disturbed times in the latter half of last century by a chieftain of the Naruka clan of Rajputs. It was recognised by the British Government in 1803, but on the violation of one of the provisions of a subsequent engagement regarding interference or agreements with other States, an expedition had to be made to compel the Chief to disgorge the territory he had occupied beyond his frontier. The results were obtained, however, by the demonstration alone, and no resistance was made. Subsequent disturbances have arisen in the State itself owing to the struggle for power between the Rajput and the Musalman factions at the court of the Chief, and in 1870, on the settlement of a revolt headed by one of the former, the Chief was deprived of power and the administration entrusted to a Council, under the presidence of a British officer. This Chief died in 1874, without issue, natural or adopted. The State thereby escheated to the Government of India, but it was decided to sanction the selection of a Chief from one of the collateral branches of the late ruling family. The late Chief, then a minor, was elected, and the Government of India invested him with full powers in 1877. In 1885 a long and acrimonious dispute between Alwar and Bharatpur, on the subject of irrigation rights from the Ruparel river, was brought to an end by mutual exchange of villages. The Chief died in May 1892, leaving a son ten years of age. The administration will therefore continue under the State Council, with the Agent as general adviser. The late Chief had received an addition to his title in 1889, and had paid special attention to the efficiency of his forces.

The Southern States:—*Haraoti Agency.* There are three States under this charge. The first, *Bundi*, is ruled by a member of the Hara clan of Rajputs, and till 1889 the Chief had the distinction of being the *doyen* of Indian rulers, having succeeded to his father in 1821, four years after the British had entered into the system of agreements entailed by the dissolution of the Maratha power in this part of India. He died in the year above mentioned, leaving the Mir of Khairpur, in Sindh, at the head of the list in age, though not in length of reign. Bundi suffered much from the attentions of Sindhia and Holkar, who took upon themselves the task of administering its revenue, after the then Chief had invoked the aid of the Peshwa in expelling a local usurper. In 1818 the State entered into an agreement with the British under which the Chief co-operated with the latter in keeping back the Pendhari bands from ranging further north. When things had quieted down, arrangements were made for recovering for him the lands of which he had been practically deprived by his Maratha neighbours. During the long reign of the late Chief, the British Government had to interfere on more than one occasion in internal affairs, and after the mutiny, owing to the Chief's want of zeal in aiding the forces engaged near his territory, friendly intercourse was broken off for about three years. Before his death, however, he received the decorations of the Star of India and of the Indian Empire. The last year of his life was distinguished by the revolt of one of his chief feudatories, the Thakur of Kapran, who stood a siege in his village, then broke out and escaped across the Chambal. His

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estate was accordingly confiscated. The *Tonk* State was acquired by the Pendhari leader, Amir Khan, and on being taken under British protection, was guaranteed in the possession of all territory he held under Holkar. He claimed, however, far more than this, as he had acquired considerable tracts from the weaker Rajput chiefs in the neighbourhood, but finally he agreed to the terms offered, with the addition spontaneously made by the Government of India, of the fort and district of Rampura. In 1867, the then Nawab was deposed on account of his attack on the Thakur of Lawa, mentioned in connection with the Jaipur charge. During the first three years of the new Chief's rule, the administration was placed under a Council, directed by a specially deputed British officer. In 1870 the Nawab was given full authority, with his uncle as Wazir. The *Shahpura* State is held by one of the Sisodia clan, and connected, therefore, with the Udaipur house, but the estate was granted in the first instance by the Moghal Emperor, and is held, since the British occupied Ajmer, under the authority of the latter power. The Chief holds, however, lands in Mewar, in regard to which he stands in the relation of feudatory to the Maharana. The present Chief owes his accession to his selection by the feudatories from amongst the nearest of kin to his predecessor, who died without issue in 1869. The management of his State was made over to him in 1875.

*The Kota and Jhalawar Agencies.*—The former of these was formed out of Bundi under pressure by the Mewar State, in the middle of the 17th century, and the younger branch of the Bundi family was in possession when the British entered into agreements with the State in connection with the suppression of the Pendhari in 1817. At this time, the minister, Zalim Singh, was the actual ruler of the State, by request of the Chief himself, and the firm administration that followed the reduction of the Marathas, raised the fortunes of Kota to the first rank in Rajputana. It was proposed that a separate estate should be granted to this minister for his great services, but he declined the honour, and induced the British Government to annex the grant to the Kota possessions. On his death, however, the administration fell into weak hands, and in 1838 the disputes between the Chief and the descendant of Zalim Singh, in whose family the office of minister had been made hereditary, and the incompetence of the latter, necessitated a revision of the arrangement, so a portion of the State was cut off and made over as a separate Chiefship to the family of the late minister, under the title of the State of Jhalawar. This necessitated a revision of the treaty engagements with the Chief, in the course of which the tribute due from him was reduced by Rx. 8,000, and an auxiliary force was prescribed at a cost not exceeding Rx. 20,000 annually. The tribute thus reduced was imposed upon the portion of the State that passed over to Jhalawar. The auxiliaries in question mutinied in 1857, and are now represented by the Deoli Irregular Force. The State was left in great confusion and debt in 1866, when the Chief died, and his successor, in spite of repeated warnings, showed no intention of effecting any improvement, so in 1874 a minister was appointed by the British Government, and the Chief withdrew from all participation in the government. On the retirement of the minister in 1876 the affairs of the State were placed in the hands of a Council acting with the Agent, and after a while, the Chief was re-admitted to a share in the administration. In 1889, however, he died, and his adopted son, a minor, was placed on the throne, the Agent and Council conducting matters as heretofore. The origin of the *Jhalawar* State has been mentioned above. When the direct line became extinct, in 1875, the question was raised by the Kota State whether the grant was not then to lapse; the Government of India, however, held that the assignment had been made unconditionally, so an adoption was sanctioned. On attaining his majority in 1883, the Jhalawar Chief entered into the same agreement that had been adopted in the case of Alwar and Dholpur, namely, that the advice of the Agent was to be sought and taken, and that no disturbance of the arrangements made during the minority should take place in important matters without the Agent's concurrence. These conditions were so frequently violated that the superintendence of a British officer had to be re-established, but at the end of 1892 the Chief who had promised compliance in future, was to be restored to power on terms very similar to those exacted on his accession.

Taking

Taking Rajputana as a whole, the decade may be said to have been one of steady, if not rapid, improvement. The remarkable increase of 20 per cent. in population since 1881, shown by the census, is probably not based entirely on fact, as a considerable part of it is, no doubt, attributable to the more accurate enumeration of 1891. The harvests, according to the reports of the local authorities, have not been such as to justify so large a development. Though there has been but one year in which a portion of the Agency may be said to have approached famine in the degree of the prevailing scarcity, the centre and west have repeatedly experienced short rainfall with all its consequences to population and cattle. The worst year was that with which this review closes, when the sufferers were the inhabitants of Kishangarh, Ajmer, and the Western States. On the other hand, on every occasion when one part of the Agency has been unlucky, there has been good rain in another, so the temporary migration which has been mentioned in connection with the west, above, has become a habit, and the population affected drive their cattle to fresh grazing grounds in preference to stopping at home to work on tanks, roads, or similar undertakings. In this respect, there is highly commendable co-operation on the part of the States visited by these gangs of wanderers, of which the reports of 1891–92 afford evidence. Grazing grounds were thrown open, and measures of relief and inspection adopted, and it is a proof of the character of the movement that, in spite of the offer of abundant waste land on which to settle, no one was found to take advantage of this facility, but invariably the gang chose to return to their home as soon as the stress of scarcity was past. The main political events have been already narrated in connection with the States where they respectively occurred. The trade of the Agency has been largely benefited by the new lines of railway, and to some extent, no doubt, by the abolition of transit duties during the last six or seven years. Rajputana is so large a tract, and in most parts of it the villages are so far apart, that police supervision is attended with peculiar difficulty. On the whole, the tendency to go out in bands for the purpose of gang robbery has been less during the period under review, though it varies with the season.

In a bad year, the lower classes, and especially the Bhil, Moghia, and Mina castes, which are but partially reclaimed from wild life, have still the inclination to assuage the pinch of hunger by levying unwilling contributions from wayfarers, but of organised robbery by professional gangs, there is now less, in most parts of the Agency. Curious outbreaks of almost obsolete crime are still reported, though very rarely. The forest tribes of the southern hills have not yet given up their practice of swinging the old women whom public opinion has decided to be witches; and, in at least two instances, self immolation has been resorted to as a protest against the high-handed conduct of a person beyond the reach of any other form of influence. Finally, this review must not end without mentioning the Association inaugurated by Colonel Walter, a late Agent to the Governor-General, for the reform of social arrangements in connection with marriage and funeral ceremonies. These are notoriously heavy burdens on a Rajput family, and both lead to debt, and the former to the neglect of female children, if not to actual infanticide. In March 1888, a meeting was held at Ajmer, consisting of representatives of all the main Rajput States, including members of the castes which chiefly profit by such expenditure as well as of those on whom it falls. Rules for the regulation of the largess and other expenses on such occasions were discussed, and it was decided to take up the question, too, of the practice of marrying at immature age. Finally, local committees were formed to see that these rules were published, and, as far as possible, adopted. In the Agent's report for the last year of the decade it is stated that the society is doing excellent work. The marginal table shows the progress of the movement. The number of Rajputs in the Agency is about 750,000, but the society

| | 1890. | | 1891. | |
|---|---|---|---|---|
| | Number Performed in compliance with Agreement. | Number of Breaches of Rules. | Number complying. | Number disobeying. |
| A. Not marrying boys before 18 and girls before 14 - | 1,481 | 307 | 2,647 | 189 |
| B. Marriage Expenditure - | 1,666 | 63 | 2,607 | 63 |
| C. Largess to Bards, &c. - | 1,774 | 41 | 2,809 | 29 |
| D. Funeral Expenditure - | 1,469 | 23 | 1,449 | 31 |

This table is presumed to refer to those only who have agreed to the rules.

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society is still young. Evidently the raising the age for marriage amongst girls is the most difficult innovation to get accepted, but the fact that even the number shown in the table of a caste like the Rajput should have accepted it indicates the vitality of the attempt.

CENTRAL INDIA.

This term is a purely conventional one, used to denote the collection of States which it has been found convenient for administrative purposes to place under the supervision of a single Agent to the Governor General, and has no basis in geographical, ethnological, or political distinctions. On the contrary, it is full of every kind of geographical and political complication. Few of the larger States thus grouped together constitute compact and continuous areas, but are composed of a number of villages here and there, with a nucleus of more or less importance round the chief town. It is the same with the political relations of the States to each other. The strong exacted tribute from the weak, but themselves paid blackmail to comparatively insignificant tribes on their border, who took every opportunity during the disturbed conditions of the latter half of last century to get what they could, when they could, out of their neighbours. Some of the Chiefs are in direct treaty agreements with the Government of India, others are guaranteed only in their possessions by that Government, and of these last some are protected by engagements between the superior State and its subordinate, others by a joint engagement by the former and the British Government, others, again, by an order issued by the superior and merely countersigned by the representative of the British power.

All this diversity is due to the circumstances in which the various States were found to be situated at the time the British Government stepped in to effect a settlement once for all, of this cock-pit of India. The submission of the Peshwa and the pacification of the country after the Pendhari war gave the opportunity. The Maratha rule in Central India consisted of nothing more than the exaction of tribute, according to partition arranged amongst the different leaders, from all whom they could reduce to subjection. The extent of their power, therefore, varied with their freedom from complications in other parts of India, for as soon as a material portion of their army left for the field, the local chieftains either took to the hills or raided on their neighbours, without any fear of immediate retribution. It was the policy of the British Government to declare the permanency of the rights found to exist at the time of their first occupation of the country, on the condition that the Chiefs thus guaranteed in possession maintained order at home, and refrained from encroachments abroad. Leaving out of the question the Chiefs under treaty, the so-called Mediatised States can be divided into two classes: those in which the interference of the superior Chief is expressly prohibited, and those in whose case no such embargo is placed. It is superfluous to enter here into the subsequent complications that have arisen out of the engagements owing to the change of conditions that have ensued on so long a period of peace and protection. It is obvious that such a transition tends to obliterate the clear appreciation of the relations subsisting at the date of the contract, and it has been the policy of the Government of India to enforce a strict adherence to the terms then settled.

The Agency is sub-divided as regards its historical relations with the British Government into two main sections. First, Central India properly so called, comprising the western states, and Bundelkhand, secondly Baghelkhand, the eastern portion, held chiefly by the eponymous clans of Rajputs, the Bundela and the Baghel. For the purpose of political supervision, there is a cross division of the western section into the Residencies of Gwalior and Indore, and the Agencies of Western Malwa, Bhopawar, Bhopal, and an assistant Agency at Guna. Baghelkhand and Bundelkhand, too, have their respective Agents at Satna and Nowgong. The Agent to the Governor-General has his headquarters at Indore.

The following statement contains the principal statistics of the more important States. It must be mentioned that within the political charge of Central India there are certain detached portions of the Tonk State, in Rajputana. Similarly, in Mewar, there are several villages belonging to Gwalior and Indore respectively. The former are included in this statement,

ment, the latter in the table for Rajputana. The areas for the different states in Central India are only approximate, owing to the number of detached and isolated villages and groups of villages scattered amongst the different Agencies, in many cases far from the main tract, and merely *enclaves* in other States.

INTERNAL STATES. (*Central India.*)

| CENTRAL INDIA. | Approximate Area in Square Miles. | Population, 1891. | Increase per Cent. since 1881. | Approximate Revenue, 1892. | Tribute. | Military Force. | |
|---|---|---|---|---|---|---|---|
| | | | | | | Men. | Guns. |
| | | | | Rx. | Rx. | | |
| TOTAL - - | 77,808 | 10,318,812 | 9·92 | 3,536,200 | 58,690 | 61,297 | — |
| Treaty States: | | | | | | | |
| Gwalior - - - - - | 29,100 | 3,366,498 | 14·07 | 1,377,900 | 5,405 | 17,428 | 48 |
| Indore - - - - - | 8,400 | 1,094,150 | 3·68 | 760,000 | 605 | 9,100 | 80 |
| Bhopal - - - - - | 6,900 | 952,486 | 0·26 | 270,000 | 18,182 | 3,129 | 6 |
| Dewas, Senr. - - - - | 300 | 82,389 | 11·42 | 32,500 | 3,302 | 677 | 2 |
| „ Junr. - - - - | | 69,684 | 2·14 | 32,500 | | 272 | 4 |
| Dhar - - - - - - | 1,750 | 169,474 | 11·58 | 80,000 | 766 | 1,634 | 3 |
| Jaora - - - - - | 600 | 117,650 | 8·49 | 96,000 | 15,903 | 848 | 15 |
| Bundelkhand: | | | | | | | |
| Orchha - - - - - | 2,000 | 333,020 | 6·90 | 90,000 | — | 4,650 | 90 |
| Datia - - - - - | 850 | 186,440 | 2·10 | 100,000 | — | 6,328 | 44 |
| Samthar - - - - - | 170 | 40,541 | 4·93 | 40,000 | — | 2,615 | 6 |
| Rewah - - - - - | 11,330 | 1,508,943 | 15·61 | 130,000 | — | 3,894 | 11 |
| TOTAL, Treaty States - - - | 61,400 | 7,921,275 | 9·99 | 3,018,900 | 44,163 | 50,575 | 313 |

There are, in all, 10 States under treaty engagements with the Government of India, and about 127 minor States, under guarantee of different forms. Six of the treaty States lie in Central India proper, three in Bundelkhand, and one in Baghelkhand. Of the minor States, 97 are in the former division and 26 in Bundelkhand. As regards the race or caste of the Chiefs under treaty, Bhopal and Jaora are Musalmans of Pathan descent. Gwalior, or Sindhia, is a Maratha, and Dhar, belonging to the Puar, a Deccan clan of Rajput origin. Indore, or Holkar, is by caste a Dhangar, the shepherd tribe of the Maratha country. In Bundelkhand, Orchha is the senior Bundel State, and Datia an offshoot from it. Samthar, again, separated at a later date from the latter. The Rewa Chief is the head of the Baghel clan, and whilst two of the smaller States in this Agency are derived from his family, the two others are connected with Panna, a Bundel Chief. Amongst the smaller States there are several Musalman possessions detached from Bhopal, or similar large estates held from Delhi, or carved out by Pendhari leaders and other freebooters. Rajputs, however, predominate, with a few Marathas, endowed with estates by the great military leaders of the last century, or, at all events, found in possession at the British settlement.

*Gwalior.*—This, the largest State in Central India, was permanently occupied by Sindhia on the return of the Marathas three years after the battle of Panipat, that is, in 1764. The subsequent history of this State is well known. The Chief had acquired so many detached collections of villages at different times in the adventurous career of various members of the family, that it was not until 1871 that the final exchanges were effected, and his rights to territory completely embedded in British or Haidrabad districts extinguished in favour of cessions more conveniently situated. The capital town has been connected by rail with both Agra and Bombay, and other lines to join together the two main sections of the State are under survey. The debt contracted in 1877, for the purpose of famine relief, was repaid to the Government of India in 1887, and the finances of the State have been for some years in a flourishing condition. The late Chief, who had received from the British Government substantial recognition of the services of his administration during the mutiny of 1857, inherited all the military instincts of his ancestors, and studied to place his local forces on an efficient footing. In 1877, therefore, in addition to the civil

INTERNAL STATES. (*Central India.*)

honours given on the occasion of the assumption of the title of Empress by Her Majesty, Sindhia was made an honorary general in the British army, and Knight Grand Cross of the Bath. He had often expressed his earnest desire to be again placed in possession of the fort of Gwalior, occupied by the British on its recapture from the revolted troops in 1858. In 1885 both the fortress and the cantonment of Morar were formally replaced in the occupation of the troops of His Highness Sindhia, in exchange for the fort and town of Jhansi, which had become the centre of a British district. The actual ceremony of rendition of Gwalior took place in March 1886. Within three months of this, the realisation of one of his most ardent wishes, the Chief died, leaving a son of 10 years old to succeed him. A Council of Regency was appointed under the presidency of the minister, Sir Ganpatrao Khadke, who had served the late Chief in that capacity for more than 20 years. The Council signalised the accession of the young Chief by notifying the abolition of transit duties throughout the State. On the death in 1888 of Sir Ganpatrao, the mother of the Chief was installed as Regent, and Bapu Sahib Jadu, her father, became President of the Council, one of the stipulations being that the Rani should have no administrative powers, or right of interference in public affairs. The Chief is under education at his own capital, under European supervision. The State was for some years infested by gangs of robbers which enjoyed comparative impunity. Of late, however, measures have been taken with some, though by no means complete, success to suppress them, and much wanted reforms in many branches of the administration have been initiated, amongst them a survey, and the settlement of the Land Revenue. One of the most noteworthy and picturesque incidents of the decade was the discovery of the treasure amassed by the late Chief. The actual amount thus found was Rx. 6,050,190. It was buried in almost inaccessible underground chambers, in pits and in wells. Neither the President of the Council or any of the courtiers knew where it had been stored, though the gross amount was entered in the books. The late Chief, it appears, began concealing his treasure about a dozen years before he died. He took into his confidence only three or four old servants, some of whom had died before him. None of the four had any knowledge of the transactions of the others, or of what was in their charge. Some of the cash was in bags which had been eaten by white ants, so that on the opening of the chamber the whole fell on to the floor in a heap. Some more was in pots buried in the garden or below the floors of the Chief's private apartments. The bulk was in silver coin of various mintage, but about Rx. 403,000 was in gold. The Council of Regency placed Rx. 3,500,000 on loan with the Government of India, to be repaid in annual instalments, beginning with the year in which the young chief is invested with his full powers. Of the rest, the proposed lines of railway will take up a portion.

*Indore.*—Like Sindhia, the founder of the Indore State was a soldier of fortune in the Maratha expedition to Northern India, about the middle of the 18th century. Early in the present century his successor compromised his prospects in Central India by his rivalry with Sindhia in the Deccan, and by his ill-advised campaign against the British in 1805, which ended in his flight to the banks of the Beas, in the futile attempt to raise a Sikh coalition against the foreigner. Hostilities again broke out during the British war with the Peshwa, but were ended at Mahidpur. Between that date and the accession of the late Chief in 1852, the State was not unfrequently troubled with internal dissension, and the intervention of the Government was required to prevent serious outbreaks. During the mutiny of 1857 the Malwa Contingent revolted and was disbanded, but no new corps was formed in its place, and the cash contribution from the Indore State was adjusted in other ways. A transfer of territory was effected in 1868, on the same lines and with the same object as that mentioned above in the case of Gwalior, but as an act of grace, a tract of about 360 square miles in the Satpura hills, which had formed part of a district ceded by Holkar by the treaty of Mandesur was returned to him in 1877. During the last ten years there have been few events of importance in this State.

Owing

Owing partly to the laxity of administration, partly to occasional failures of crops, gang robbery was exceptionally rife for many seasons, and has only been kept under during the last year or two. The late Chief died in 1886, three days before his hereditary rival Sindhia. He was succeeded by his son, who, until within a comparatively recent period, showed little interest in the administration, and gave but slender support to the ministers who were successively employed by him. Lately, however, the reports have been more favourable.

*Dewas.*—This State, which is divided into a senior and junior branch, lies close to Indore; the Chiefs are Marathas, and came into Malwa with the first Peshwa, and suffered much oppression at the hands of their more powerful companions, Sindhia and Holkar, in addition to the extortion of the Pendhari raiders in whose road the State lay. Beyond the fact that the two branches were separated in interests in 1841, there is little to record of the State since it was taken under protection in 1818. The present Chief of the senior line has allowed the State to get into serious pecuniary trouble, and in 1875 the management was placed under a Superintendent appointed by the Agent to the Governor General, and the Chief was pensioned off. Early in 1881 the debt had been mostly paid off, and the Chief was re-admitted to a share of the administration. After sundry changes of adviser, he was found incompetent to have charge of his State, so the former arrangement has been reimposed, and a Superintendent takes upon himself the whole of the duty of administration, under the Agent's supervision. The Chief of the junior branch died in 1892, and was succeeded by the elder son of his adoptive brother, a minor, so that the State is under the direct administration of the Agent.

*Jaora.*—The Nawab of Jaora is the descendant of the brother-in-law of the celebrated Amir Khan, who founded the State of Tonk, in Rajputana. His ancestor represented that successful freebooter at the court of Holkar, and gained the favour of that Chief to such purpose that he was granted an assignment of land, which was recognised at the time of the negotiations ending with the treaty of Mandesur. Thus, whilst guaranteeing the succession, the British Government authorised the presentation to Holkar of the usual fine on the accession of each occupant of the throne. This provision, however, allowed of no intervention on the part of the Maratha Chief in the matter of succession. The present Nawab succeeded his father in 1865, and was invested with full powers of administration in 1874. In 1881 a Council was appointed to advise him, but gradually retired from their office, owing to the attitude assumed towards them by the Chief. In 1885 the state of the finances necessitated a loan from the Government of India to enable the administration to be carried on, and a new minister was nominated to set matters straight. The land revenue collection, which had previously been left on the old and generally prevalent basis of annual farms, was taken into the hands of a State Agency with beneficial results to both raiat and the treasury. It is expected that, if the present system is maintained, the State will be free of debt by 1896, or thereabouts.

*Dhar.*—The State of Dhar was one of the earliest to be assigned by the Peshwas to a Maratha Chief in Central India, but the grant was soon discounted by the depredations of Sindhia and Holkar, whose authority was extended by means that were not within the reach of the Puar and his more localised influences. Its subsequent history is not different, save in detail, from that of most of the other States taken under British protection about the year 1818. Some of the territory it had lost was restored, some of its tributary rights were transferred or extinguished, and a loan was made by the Government of India to keep the State solvent. In the mutiny of 1857, this State took the wrong side, and was confiscated by the Government of India, but was restored in 1864 on the arrival of the young chief at the age of 18. In 1880, the only wife of the chief having died, the latter adopted his nephew, with the sanction of the Government of India. The administration of the State has been judiciously conducted, and the Chief has on two occasions received the honour of decorations from Her Majesty.

INTERNAL STATES. (*Central India.*)

*Bhopal.*—Amongst the Musalman States of India, Bhopal comes second in rank. The founder was an officer in the service of Aurangzib, and took advantage, like so many others, of the removal of that strong hand to enlarge the domain of which he had been in charge, and to assert his independence. By race he was a Pathan. On the arrival of the Marathas, the Bhopal Chief had to abandon his claim to estates he had got in Malwa, but was confirmed in those round his headquarters. During the struggle with the Pendhari bands and the Bhonsle Chief of Nagpur, Bhopal fell into the hands of a collateral branch of the reigning family, in whose line it has since continued. The new Chief managed to convert, on payment of due consideration, the Pendhari leaders into allies against the Marathas from the south-east, and thus Bhopal became, a little later on, the place of refuge for many of the bands that were being hunted from other parts of the country. This led to engagements with the British Government for assistance in suppressing them, which were loyally observed by the Nawab, who received a territorial reward for his help. One of the most noteworthy features in the administration of this State has been the predominance of successive Begams since 1819. First, the minor Chief was under the Regency of his aunt, and married her daughter, in 1835. Family dissensions reached such a pitch that the mediation of the Government of India was solicited and found inevitable. On the death of this Chief, the succession passed to his daughter, under the regency of her mother, and subsequently the daughter found it best to withdraw her claims to power during the lifetime of the latter. In 1868, the elder Begam died, and the younger assumed the reins of the State, having obtained the recognition of the Government of India to the succession of her daughter, in turn. Having lost her husband, who enjoyed the title of Nawab consort, in 1867, she married again, and became a widow for the second time in 1890. As she had withdrawn for some time from public affairs, the administration fell largely into the hands of Maulvi Sadik Hassan, her second husband, whose interference was so detrimental that in 1885 the Government of India was obliged, after repeated expostulations, to forbid it. A responsible minister was pressed upon the Begam, who was advised to select an experienced native for the post. She asked, however, for a European officer, and the services of one were placed at her disposal during the years 1886 to 1888. He was succeeded by a Musalman official, approved by the Government of India. On the whole, the laws and system in this State were found to be fairly good, but it was the execution and actual administration that were faulty. Of late years matters have been on the mend. The State, however, has been one of the three most infested by gangs of robbers during the period under review, but for the last two years the number of offences of this class has been less. The local battalion, formed as a military police corps, was despatched in 1878 to take part in the Afghan campaign. The State is now traversed by the Indian Midland Railway, and a cross line to Ujain, in the western division of Sindhia's territory, is under survey.

*Bundelkhand.*—This collection of States is separated, with the exception of Datia and Samthar, from the rest of Central India to the westward, by a belt of British territory comprised partly in the North-west, partly in the Central Provinces. The Bundela chiefs were much harassed by the Delhi Musalman rulers, but one managed to establish himself firmly in the eastern hills, and obtained the help of the Peshwa against one of his assailants of the Musalman faith but lower in rank than the Moghal. This was the thin end of the wedge by which the Marathas get their hold on Upper India.

*Orchha* was the only State that was not subjected to the Peshwa, and the first treaty between this State and the British Government was concluded in 1812. In 1842 there was a dispute as to the succession which led to some disturbances, but with this exception, the State has been tranquil, and the administration, comparatively speaking, uneventful. The present Chief succeeded his elder brother in 1874.

*Datia* is an offshoot of Orchha, both as to territory and as to the family of the Chief. It passed to the British with the rest of the suzerainty of the Peshwa

Peshwa in Bundelkhand in 1804. Some addition to the Chief's domain was made by the Government of India in 1817. In 1857 an illegitimate son of the late chief disputed the succession of the adopted son, and raised the standard of revolt under the support of the Rani regent. The British force that was marched into the State soon reduced the stronghold which the rebels had seized, and deported the ringleaders. During the decade the only event of importance, besides the opening of the railway was the settlement of the position of the Barauni estate in relation to the Datia chief, which had been for many years in dispute. The Government of India decided that the Thakur held on a distinct grant from Delhi, though he is politically subordinate to the chief of Datia. INTERNAL STATES. (*Central India.*)

*Samthar.*—It was only one generation before the British succeeded the Peshwa in the supremacy over Bundelkhand that this State seceded from its parent, Datia. It was recognised, however, at the general settlement as independent, and a treaty entered into with the then ruler. The next chief succeeded in 1827, but in 1858 he became insane, and the Rani was appointed Regent. Six years later the eldest son was recognised as Regent, and a portion of the State assigned for the support of the late Regent and her younger son. She died in 1880, and the inconveniences of the arrangement under the administration of the son were such that the assignment was revoked, and a village with some cash allowances given to the late Chief and his younger son, who looked after him. The former died in 1890. The elder son, who had long been *de facto* ruler, then simply became so by title.

Amongst other States in Bundelkhand may be mentioned Panna, once celebrated for its diamond mines, now nearly worked out; Charkari, Bijawar, and Chhatarpur, the last named containing the Cantonment of Nowgong, the head quarters of the Agency.

*Baghelkhand.*—In this Agency, the only State of importance is Rewa, which began its connection with the British Government in the same way as so many others in this part of India, namely, as the sequel to a Pendhari raid. Intervention, too, was subsequently necessitated by a not unusual cause, the recalcitrancy of subordinate chieftains to the Chief's demands. In 1875 the Chief proposed to hand over the management of his State to the Government of India, as he confessed himself unable to undertake it, and the debts were very heavy. Certain conditions were imposed, to be fulfilled when the State had been cleared of debt and handed back to its Chief. Meanwhile, before the time came for the operation of the above conditions, the Chief died, leaving a son of $3\frac{1}{2}$ years old. The Agent, who had been managing the State, as above described, was in 1882 appointed Superintendent, with a consultative body of the local chieftains to aid him. In 1885 the coalfields of Umaria, with jurisdiction over the same, were temporarily made over to the Government of India, on payment of mining royalties. The result has been the opening of a chord line from the main line between Jabalpur and Allahabad to the Bengal Nagpur line, through the eastern portion of the Central Provinces, taking these fields on the way. Efforts have been made to attract settlers from the more crowded tracts of the Ganges Valley to waste land in this State, but hitherto without success. At the same time, the administration has been so much improved since the State has been under the direct management of the Agent, that it is not improbable that this outlet will ultimately be appreciated. Rewa is one of the States in which the law of the Brahman caste is reported to have been maintained in its orthodox strictness, so that in the report for the year 1890–91, one of the most remarkable events noted was that at last one of this caste had been hanged for murder.

The States in connection with the Panjab Government may be divided geographically into the Cis-Satlaj, the Hills and Central, the Western Plains, and the Delhi groups. Ethnically, they form themselves into the Sikh, the Rajput, PANJAB STATES.

INTERNAL STATES. (*Panjab.*)

Rajput, and the Musalman. The following Table shows their respective area, population, and revenue.

| | Area in Square Miles. | Population, 1891. | Increase Per Cent. since 1881. | Approximate Revenue, 1892. | Tribute. | Military Force. | |
|---|---|---|---|---|---|---|---|
| | | | | | | Men. | Guns. |
| Cis-Satlaj : | | | | Rx. | Rx. | | |
| Patiala | 5,951 | 1,583,521 | 7·9 | 578,130 | – | 7,330 | 109 |
| Jind | 1,268 | 284,560 | 13·9 | 61,100 | – | 2,108 | 12 |
| Nabha | 936 | 282,756 | 0·8 | 70,000 | – | 1,870 | 6 |
| Kalsia | 149 | 68,633 | 1·4 | 17,530 | – | 240 | 3 |
| Faridkot | 643 | 115,040 | 18·6 | 30,000 | – | 402 | 6 |
| Malerkotla | 162 | 75,755 | 6·6 | 31,400 | – | 314 | 6 |
| Trans-Satlaj : | | | | | | | |
| Kapurthala | 598 | 299,690 | 18·6 | 120,000* | 13,100 | 1,202 | 13 |
| Chamba | 3,126 | 124,032 | 7·1 | 35,000 | 500 | 218 | 3 |
| Mandi | 1,131 | 166,923 | 13·5 | 40,600 | 10,000 | 189 | 5 |
| Suket | 404 | 52,403 | 0·1 | 10,500 | 1,100 | 38 | 4 |
| Simla Hill States | 6,278 | 494,334 | 9·7 | 68,730 | 3,210 | 2,386 | 30 |
| Bhawalpur | 17,285 | 650,042 | 13·34 | 160,000 | – | 1,869 | 10 |
| Delhi Group : | | | | | | | |
| Dojana | 89 | 26,450 | 8·4 | 6,600 | – | 165 | – |
| Loharu | 226 | 20,139 | | 7,100 | – | 94 | 11 |
| Pataudi | 53 | 19,002 | | 7,300 | – | 95 | 6 |
| TOTAL | 38,299 | 4,263,280 | 10·42 | 1,243,990 | – | – | – |

* Excluding Rx. 92,500 from Oudh estates.

*Cis-Satlaj States.*—The first group that claims attention is that of the Cis-Satlaj, which consists at present of one Musalman and five Sikh States. The former, *Malerkotla*, is the oldest in order of existence, and was founded by an Afghan family that acquired influence under the Delhi rule, and in the end became independent of that monarchy. The Nawab joined Lord Lake early in the century and was guaranteed in the possession of his estates, with the right of succession according to Musalman law. On the accession of the present Nawab in 1871 some changes were made in the arrangements regarding the distribution of the State property, and the jurisdiction of the relatives of the Chief in their own estates. In 1885 the Nawab was found mentally unfit to manage his affairs, so the State was placed under a Superintendent, subject to the control of the local Commissioner. The Sikh States were protected against the centralising efforts of Ranjit Singh, who had risen out of the ranks of the loosely-tied confederacy of the Khalsa, and was rapidly incorporating the whole of the Sikh territory into a kingdom for himself. Patiala, Jind, and Nabha, all belong to one family, known as the Phulkian. They all carved out principalities for themselves in the latter years of last century. *Patiala*, now the largest, belongs to the junior branch of that family. Early in his connection with the British an exchange was effected which has since become of considerable importance. The hills, that is, which now constitute the greater part of the Simla district, were ceded in exchange for some villages in a more convenient situation relatively to the Chief's other possessions. In both the Nipal war of 1814, and the mutiny of 1857, the Patiala Chief rendered assistance with his forces to the British army, receiving in reward sundry villages in perpetual sovereignty. On the outbreak of the Afghan war in 1878, the Council of Regency again placed the forces of the State at the disposal of the Government of India, and they were employed, with those of some of the other Chiefs of the Panjab, in the operations in the Kuram Valley. In return for this practical manifestation of loyalty, the present Chief, who attained his majority in 1890, has been exempted from the obligation of presenting the usual token of subordination at formal meetings with the Viceroy.

The State of *Jind* was recognised by the British Government in much the same circumstances as Patiala. It was the first to march against the mutineers in Dehli, and its forces remained till the conclusion of the siege. The Chief received on this occasion a grant of territory, and for his aid during the Afghan war, as above mentioned, a personal distinction was conferred upon him. The present Chief is a minor, so his affairs are in the hands

hands of a Council of Regency. *Nabha* is a State with almost the same history as Jind, except that during the Sikh war the then Chief was deposed by the British Government for refusing to comply with the requisitions of the Agent to the Governor General. The present Chief was installed in 1871, and his services in the Kuram valley in 1878 have been recognised by personal decoration. The small State of *Kalsia* was recognised shortly after the Phulkian States. The present Chief succeeded his elder brother in 1886, and as he is now but 11 years old, the State is still under a Council of Regency. The history of *Faridkot* is slightly different from that of the other Jat States in this group. The founder was one of the favourites of the Emperor Akbar, and his nephew built himself a separate fort, and in time became independent. The latter portion of the State was seized by the Sikh Government, and subsequently fell to the British power on the occupation of 1846. In reward for the aid rendered by the Chief during the Satlaj campaign, the Government of India restored the confiscated portion to the parent State. The Chief rendered considerable services during the mutiny, which were recognised by additions to his title, and the exemption from furnishing a small body of horse when required. The present Chief succeeded in 1874, and his force served in the Afghan war.

*Trans-Satlaj States.*—The States across the Satlaj include Kapurthala, in the plains, and Chamba, Mandi, and Suket, with the group known as the Simla States, in the hills. *Kapurthala* originally comprised territory on both sides of the Satlaj, part of which the founder of the line and his successor had acquired by the sword, part had been granted by Ranjit Singh. This portion of the State was placed under British protection with the rest of the Cis-Satlaj territory in 1809, but in the first Sikh war the Chief took part against the British, so the above tracts were confiscated, and in 1846 the rest of the State was confirmed in his possession on the commutation in cash of the service obligations under which the Chief lay to the late Government at Lahore. During the mutiny of 1857, the then Chief rendered signal aid in Oudh to the Government of India, which rewarded him with a considerable grant of land out of the attached estates in that province, without, however, alienating to him the sovereignty over it. On the death of that Chief, who had been created a Raja, soon after the pacification of the Panjab, the State came very near a partition, owing to dispute between the heirs. The dismemberment was averted, however, by agreement amongst the persons most interested. The present Chief succeeded his father in 1877, as a minor, and the State was administered till 1890 by a superintendent appointed by the Government of India. The Chief visited England during the year 1893. In both his case and that of his contemporary, the young Chief of Patiala, the Local Government have had to record an opinion that the commencement of their direct administration has been disappointing.

*Hill States.*—Of the Hill States, Mandi, and Suket lie side by side, along the flanks of the southern spurs of the Himalaya, Chamba, and Bashahr, one of the Simla group, extend further into the mountain system, and include some portions of the snowy ranges. Most of these States are under Chiefs of old family, claiming direct descent from some of the ruling lines of Rajputana. The *Simla* group came into the possession of the British Government after the Gurkha war of 1815, and with the exception of a few small military positions, was restored to the possession of the Chiefs from whom it had been wrested by the Nipali Government. In several of these small states, the most valuable property is the forest land, which in the case of Bashahr and Chamba has been leased by the Government of India, and placed under the administration of the trained agency of the forest service. Sirmur, or Nahan, one of these States, received special recognition on account of the Chief's services in the mutiny, and his force joined in the operations in the Kuram in 1878. Of the rest, several have a revenue of little over Rx. 150, and in one it does not exceed Rx. 60. *Mandi* possesses salt mines of considerable value, the exports from which into British territory is regulated by special agreement. By the existing arrangement, the price is not to be reduced without the previous sanction of the British Government, and the duty levied at the mines is only to vary with that on salt produced in British India, in the proportion of one to five. *Chamba* was in part made

INTERNAL STATES. (*Panjab.*)

over to Gulab Singh, of Jammu, but in the following year, it was placed entirely under the British Government, which granted the usual guarantee to the then Chief. The present incumbent of the throne reached his majority in 1884, but it has been thought advisable to retain for some time longer the aid of a Superintendent. Previous to this date, the State had been practically under direct management since 1862, with the exception of the three years 1870–73, during which interval the Chief who had succeeded in the former year had satisfied himself that he was incapable of administration, and requested the restoration of the British management. *Suket* is the State that has the unenviable reputation of being the worst administered of all under the Panjab Government, and the Chief, since his accession to power in 1884, has been repeatedly warned of the probable consequences of his oppression. The main complaints are with regard to agrarian matters. A special European officer from the Panjab Commission has been posted as adviser to the Chief, with instructions to see that the orders of the Local Government respecting reforms urgently needed are duly carried out; but the whole condition of the State is under consideration.

*Bahawalpur.*—Bahawalpur is a large Musalman State, founded on the ruins of the Durrani empire, early in the century, and entered into engagements with the British Government in 1833, and again in 1838. For aid during the operations round Multan in 1847–8, a special pension was granted to the then Nawab for his life. The present Chief succeeded as a minor in 1866, after the rather troubled reign of his father. Matters were still unsettled, so the application for the appointment of a British officer, with full powers of administration, was granted on certain conditions. Since 1867 there have been no dynastic conspiracies. The Chief was invested with full powers in 1879, but it was stipulated that the Council of local notables should be retained for three years, unless the Panjab Government thought it advisable to make any changes. There have been frequent ministerial changes, owing, apparently, to the caprice of the Chief, but, on the whole, the State has maintained a good deal of the benefit it derived from its spell of direct management.

NORTH-WEST PROVINCE STATES.

Two small States are in political connection with the Government of the North-West Provinces. Of these, *Rampur* is situated in Rohilkhand, and was founded early in last century by one of the Afghan families from whom the tract derives its present name. It was guaranteed by the British Government in 1774. Its area is 945 square miles, with a population of 551,249, the revenue is about Rx. 300,000. The weak health of the Chief who succeeded in 1887 induced the Government to give him the aid of a Council, in which he was President, with a vice-president and two members. In February 1889 he died, leaving a son of 14 years of age, so that the same Council, under the presidency of the half-brother of a late Nawab, continued in office. In April 1891, the vice-president, General Azim u din, was murdered, and in the following July, the President resigned. Since then the State has been administered by a European officer as President. The military force is about 3,000, with 28 guns. The Nawab paid a visit to England in 1893. The other State is the hill tract of *Tehri*, or Native Garhwal, which, with the comparatively large area of 4,164 square miles, has a population of no more than 241,242, though there has been a considerable increase over that returned in 1881. The State was recovered from the Gurkhas after the war, and restored to the Chief with the exception of the part east of the Alaknanda River. The late Chief died in 1887, and his son was duly installed in 1892, the interval having been bridged by the usual expedient of a Council of Regency. The Rani mother supervised the administration till the accession to power of her son, and her management of the State is favourably noticed by the Local Government. The valuable forest tracts that lie within this State have been leased to the British Government for some time, and the contract was renewed in 1885 for another twenty years. During the last decade Rampur increased in population by 1·72 per cent., and Garhwal by nearly 21.

In connection with this part of India, too, may be mentioned the death of the ex-King of Oudh, which occurred in September 1887. A special

Act

Act was passed by the Council of the Viceroy and Governor General in connection with the administration of his estate, and pensions were granted to his family and dependents. INTERNAL STATES.

None of this group is of considerable size or importance. The following table gives the main statistics regarding them :— BENGAL STATES.

| STATE. | Area. | Population. | | Approximate Revenue, 1892. | Tribute. | Military Force. | |
|---|---|---|---|---|---|---|---|
| | | 1891. | Increase per Cent. since 1881. | | | Men. | Guns. |
| | | | | Rx. | Rx. | | |
| Kochh Bihar | 1,307 | 578,868 | —3·9 | 133,750 | 6,700 | 192 | 4 |
| Hill Tipperah | 4,086 | 137,442 | 43·71 | 31,250 | — | 314 | — |
| Orissa Mahals, 17 | 14,387 | 1,696,710 | 20·31 | 94,350 | 3,325 | — | — |
| Chutia Nagpur States, 7 | 16,054 | 883,359 | 30·28 | 11,550 | 469 | — | — |
| TOTAL | 35,834 | 3,296,379 | 18·30 | 270,900 | 10,494 | 506 | 4 |

In these States there is little or none of the Rajput element that is so prominent in Central and Western India. The two first States are under Chiefs of Mongoloid origin, swept southwards from the plains of Central Asia. The two last are the remnants of the possessors of the dark pre-Aryan races, which held the hill tracts long after they had been dispossessed in the plains. The Chiefs of *Tipperah*, like those of Manipur, have been derived by their genealogists from a mythical Kshatria stock, ever since they were converted to Brahmanism about 200 years ago. The State was under the Moghal Government of Bengal for some time, and passed under British rule in 1765. The former Chief was reinstated, and his succession has been maintained. Owing to the weak administration of the Chief, and the importance of this tract from its position on the frontier of the Lushai tribes, an agent of the Local Government was appointed to reside in the capital, and to protect from thence the interests of the adjacent British districts against raids by Lushais across the Chief's territory. After a time, however, the office was entrusted to the Collector, or chief civil officer of the nearest district. The maladministration of the Chief continued to incur severe remonstrances from the Government of Bengal, until in 1889 the expedient was adopted of appointing a responsible minister for five years, with full powers of administration. This arrangement has hitherto worked well, the State debt has been reduced, and the revenue collected with regularity. The Chief, in addition to his feudatory position, is a considerable landowner in some of the adjacent districts of Bengal. *Kochh Bihar* is the relic of a once large State founded by the Kochh tribe of the Brahmaputra valley, who settled there from the north of the Himalaya. This State was overrun by the Afghan King of Bengal towards the end of the 15th century, and a little more than a century later the Moghal inroads had shorn the State of still more of its territory. In 1772 the British Government was asked to intervene in a fraternal dispute, in which the Bhutan State had taken part, and the State of Kochh Bihar was taken under British protection. In 1873 the question arose whether this territory should be entitled a State or an Estate, and it was decided that the former term, which had been used in the deed conferring the right of adoption, was to be retained. The present Chief succeeded in 1863, and was invested with full power in 1883. During his minority the State was managed by a British officer under the general supervision of the Local Commissioner. At present the Chief is President of a Council of administration, and the Superintendent of the State, vice-president, with a revenue and a judicial member, who are both officers who have been in the service of the Bengal Government. Under this system the revenue collection and the judicial procedure have been much improved. In point of population the State shows a slight falling off of 4 per cent. since 1881, which has not been explained. The Chief has twice

INTERNAL STATES. (*Bengal.*)

visited England, and has received from the British Government an addition to his title. The small States known as the *Orissa Tributary Mahals* came under British rule at the same time as the corresponding tracts in the Central Provinces, to which reference is made below. Indeed, the whole group was under the Chief of Nagpur, until the defeat of the Marathas in 1803. Treaties were concluded with the larger Chieftains, which were afterwards confirmed when the country was finally taken under British protection, but the whole question of determining the political and legal position of these States is now under the consideration of the Government of India. The largest State is Morbhanj, which for some time was under direct management. It was restored to the Chief, however, in 1890. In 1868 a disputed succession, with its not unfrequent accompaniment of disorder and violence, led to the pacification of the State of Keonjhar by the dispatch of a British force and the management of the State by a British officer for 10 years. In 1891 an insurrection broke out amongst the hill-tribes, which led to the temporary abandonment by the Chief of his post, in order to avail himself of the refuge afforded by the nearest British military station. On inquiry into the causes of the outbreak, it was decided that the Chief should be replaced, but measures were necessary for the improvement of his administration. An Agent was therefore appointed to assist and advise him. The hill tribe of the Kandh, or Khond, is one of the most important factors in the population of parts of this tract, and were found in 1885 to be getting beyond the control of the local Chief of Bod, who admitted that he had no effective possession of these highlands. As the latter were becoming the resort of bad characters escaping from justice in other parts of the country, it was determined to take the whole tract under direct administration; so with Angul, which was annexed on account of the misconduct of the Chief some years ago, the Kandh Mahals have been formed into a district under special regulations, managed by a British officer as part of British territory.

With one exception, the *Chutia Nagpur States* were acquired by cession from the Bhonsle Chief of Nagpur, in 1817. In the case of Singhbhum, a tender of allegiance was made by the Chief in 1818, in order to get assistance against the Khols, a wild tribe of the hill tracts in this State and its neighbourhood. The State mutinied in 1857, and with the exception of a portion which was distributed to his kinsmen, who had stood firm against the mutineers, was sequestrated. In 1875 a fresh settlement was made for 20 years with the Chiefs of this tract, the tribute to be liable to revision in 1895, except in the case of the Chief of Udaipur, which, having been confiscated in 1852, on the conviction of the Chief for manslaughter, was given as a reward for services during the Mutiny to the younger brother of the Chief of the State of Sirguja, to which Udaipur had been formerly subordinate. The Chief of Saraikala was distinguished for loyalty to the British Government during the Mutiny, and received an addition of territory and a personal title. He died in 1883, and his successor has been allowed the title of his father, as a special distinction. During the disturbances in the Keonjhar State in 1891, of which mention has been made above, this Chief sent a well-drilled and equipped body of armed police to help in subduing the outbreak. For this he was formally presented with a richly ornamented gun, with suitable inscription. The States are necessarily backward, partly owing to the nature of the country, partly to that of the inhabitants, who chiefly belong to the semi-reclaimed forest tribes. By the former communication is rendered difficult, though the approach of the new line of rail between Assensol and Nagpur is leading to the extension of feeder roads to the main stations, and is said to be bringing population into the lowlands from other parts of Bengal. In respect to public instruction, it is worth note that a decrease in the attendance at some of the schools is attributed to the refusal of Bengali and Uriya sojourners in these States to sit in the same school as the forest tribes, since their connection with the British system of inspection was closed, an objection which was apparently not effective when Government supervision was exercised.

CENTRAL PROVINCE STATES.

These small States passed under British protection at different times in the course of the relations between that Government and the Bhonsle ruler of Nagpur. First of all, the eastern or Sambalpur group was made over [illegible] by

by the Treaty of 1803, but was restored as an act of grace in 1806. In 1819, whilst the Nagpur State was under the management of the Government of India, an inquiry was made into the relations of the several petty Chiefs to the Maratha ruler, and it was found that there was a considerable difference in them. The Western or Nagpur group mainly consisted of grants made to local families as rewards for service or in earnest of their efforts to keep the surrounding country quiet. They contributed a certain military force, and paid rent, the amount varying with the ability of the Maratha to enforce it. The Sambalpur, or eastern group, had long been in the hands of petty Chieftains, more or less under the suzerainty of one or two of their number, either the Raja of Patna or of Sambalpur. They were ceded by the Bhonsle Chief in 1826, after changing hands several times during the interval that had elapsed since the first Maratha occupation in 1755. Settlements, liable to revision, were first made, and these remained unaltered in their main provisions, that is, as to judicial powers, the general principles of administration, and tribute, till the Nagpur State lapsed to the British Government in 1853. On the constitution of the Central Provinces as a separate political unit in 1861 an inquiry was made into the circumstances and position of the whole of the Chiefs and estate-holders of the tract, about 165 in number. It was then decided that 15 were entitled to be considered as feudatories, and the rest as British subjects. Guarantees were given to the States in question, and the tribute from each settled for 20 years from 1867. In 1888 the amounts were revised, and it was held that these States could fairly augment their contributions to the Power under whose protection their territory had been so materially developed and its resources increased. The following table includes the main figures concerning these States. There is no military force in any of them :—

| State. | Area, Square Miles. | Population, | | Approximate Revenue, 1892. | Tribute. |
|---|---|---|---|---|---|
| | | 1891. | Increase per Cent. since 1881. | | |
| | | | | Rx. | Rx. |
| Khairagarh | 931 | 181,184 | 9·1 | 16,300 | 7,000 |
| Nandgaon | 871 | 183,866 | 11·9 | 22,330 | 7,000 |
| Chhuikhadan | 154 | 36,288 | 10·0 | 5,650 | 1,500 |
| Kanker | 1,429 | 82,379 | 29·5 | 6,581 | — |
| Kalahandi | 3,745 | 326,295 | 45·3 | 12,250 | 1,200 |
| Bastar | 13,062 | 310,884 | 58·4 | 16,830 | 1,700 |
| Kawardha | 798 | 91,813 | 6·3 | 9,290 | 3,200 |
| Sarangarh | 540 | 83,210 | 16·7 | 4,700 | 350 |
| Sakti | 138 | 25,374 | 11·2 | 2,450 | 130 |
| Raigarh | 1,486 | 168,525 | 30·7 | 8,320 | 400 |
| Bamra | 1,988 | 104,367 | 28·4 | 4,960 | 150 |
| Rairakhol | 833 | 20,335 | 14·6 | 1,430 | 80 |
| Sonpur | 906 | 195,245 | 9·2 | 7,640 | 900 |
| Patna | 2,399 | 332,197 | 28·8 | 9,120 | 850 |
| Makrai | 155 | 18,549 | 10·6 | 3,870 | — |
| TOTAL | 29,435 | 2,160,511 | 26·4 | 131,720 | 24,460 |

The Zamindari estates cover an area of 20,932 square miles, with a population of 1,339,549. One of the most noteworthy facts connected with the administration of these small States is that with few exceptions they are, or were during the greater part of the period under review, under the direct management of the British Government, either on account of the minority or the incompetence of their Chiefs. The latter, when in power, are invested with full revenue and civil jurisdiction, and in criminal cases only

INTERNAL STATES. (*Central Provinces.*)

sentences of death and in the smaller States of long terms of imprisonment also, have to be confirmed by the Chief Commissioner. In 1882, owing to the number of States that came under direct arrangement, it was decided to remove the supervision of the whole of the Chattisgarh Division States from the hands of the Commissioner, and place it in those of a separate political Agent. The Makrai State, which is the only one not falling into this category, is under the Narbada Commissioner.

It is superfluous to enter into the detailed history of the decade in the case of such small and politically unimportant territories. The main facts are as follows :—

*Khairagarh* was under direct management, owing to maladministration, till 1883, when it was restored on a change in the incumbent of the throne. In 1890 the successor died, and his son is now in independent charge.

*Nandgaon* has the peculiarity of being ruled by a caste which professes celibacy, but which, in this case, has acquired the privilege at the hands of the Government of India of succession through actual descent, instead of by adoption. In 1888 it was found advisable to supersede the regency of the minor Chief's mother, by direct administration through a native official from a British district.

*Chhuikhadan*, too, is under a member of a religious order, but he is unbound by vow of celibacy. The present incumbent succeeded in 1887, but it has been found necessary to supplement his administration with a special officer, in consequence of his oppression and exactions.

*Kawardha* belongs to a local family. The Chief was removed from power for five years in 1884, and in 1889 the Government of India had to extend the period of direct administration. During the latter the Chief died, and his nephew, a minor, succeeded to the same arrangement.

*Bastar* is a large and wild tract in the south of the Central Provinces, bordering on the Madras Presidency; and is under a Telingana Chief of an East Deccan family. There were disturbances in the State which led to great confusion and lax administration, the Chief's family being divided against itself. In 1883 a cousin of the Chief was installed as minister, assisted by a native revenue official from British territory, but in 1886 the arrangement broke down, and an official of higher rank had to be appointed as minister. In 1891 the Chief died, and, as his son was an infant, the State is now under direct management, through a Superintendent.

Formerly a feudal part of *Kalahandi* was bound by the curious custom that the chiefship should be held by the representative of the oldest branch of the ruling family, whilst the administration had to be conducted by the head of the younger branch. The disputes between what were known as the Pat and the Tat Chiefs led to the partition of this portion of the State, and the incorporation of some of it into the parent territory. In 1881 the Chief of the whole State died, leaving an adopted son of a few years old. The succession was disputed, and, in the ensuing confusion, the Kandh, a wild tribe of the hills, broke into revolt, after applying for redress for sundry acts of oppression to which they alleged they had been subjected. British troops were marched to the scene of disturbance, and a settlement effected by an Agent specially appointed to the charge of the State. The latter is now under a Superintendent, acting under the control of the Agent for the whole of the States in this Division. The Chief of *Kanker* became mentally unsound in 1889, and the minister had to take charge of the administration, pending the Chief's recovery. In 1892 it was decided to appoint a Superintendent, under the Agent's supervision, as in the cases of Kalahandi and Bastar. In *Makrai* the gross mismanagement of the Chief led to a similar course being adopted in 1890. The Chief of *Sakti* was deprived of power in 1875, for oppression and the use of forged documents. Early in 1892 the Government of India sanctioned the installation of his elder son, with an experienced minister to aid him, in substitution of direct management. The State of *Sarangarh* is under a Superintendent, and has been for some years, since the maladministration of the Chief forced this course upon the Local Government. Two Chiefs have died in the interval, and the present incumbent is only seven years old, and succeeded in 1890.

The same story has to be told in regard to *Raigarh*, where the Chief was set aside in 1885. He died in 1890, and his son is to be formally installed shortly.

INTERNAL STATES. (*Central Provinces.*)

shortly. The *Bamra* State is one of the few under the administration of the Chief in person, who has been decorated with the Companionship of the Indian Empire. In *Rairakhol* there reigns a Chief who succeeded to the throne as long ago as 1825. He had the misfortune to lose his only son when he was growing too infirm to hold the reins of power himself, and the affairs of the State fell into confusion. In 1889, therefore, he appointed a special minister to act for him under the supervision of the Agent. *Sonpur* is an offshoot of the late Sambalpur chiefship. For many years the Chief had taken the advice of the British Government in entertaining a trained revenue officer as his minister, so as to remedy the grievances, of which there had previously been loud complaints. This Chief died in 1891, and has been succeeded by his eldest son. *Patna*, like Kalahandi, has suffered from a revolt of the Kandh tribes, and in 1871 the management of the State was assumed by the British Government. The heir of the late Chief is still under instruction at the Chief's college in Jabalpur, and the former arrangements continue in force.

On the whole, these States have but recently entered into their period of prosperity, as they were formerly cut off from the busier and more advanced parts of India by thick forests and unhealthy hill tracts. The Bengal-Nagpur line now passes through the whole of the Chattisgarh and Sambalpur country, and many of the larger States lie along its course, or are connected with it by good roads. The Chiefs, as may be judged from the above sketch of their administration, have hardly, as yet, risen with their material circumstances, and in the wilder parts of the tracts, where government is still in a rudimentary form, they are unable to control their subjects at all if antique custom be materially violated. It is, therefore, fortunate for them that at this juncture so much of their territory is temporarily in British hands.

MADRAS STATES.

The following table shows the area, population, and resources of the five States connected with the Madras Government :—

| State. | Area in Square Miles. | Population. | | Approximate Revenue, 1892. | Tribute. | Military Force. | |
|---|---|---|---|---|---|---|---|
| | | 1891. | Increase per Cent. since 1881. | | | Men. | Guns. |
| | | | | Rx. | Rx. | | |
| Travancore | 6,730 | 2,557,736 | 6·52 | 784,800 | 81,300 | 1,533 | 6 |
| Cochin | 1,362 | 722,906 | 20·42 | 170,000 | 20,000 | 362 | 4 |
| Pudukottah | 1,101 | 373,096 | 23·48 | 70,000 | – | 157 | 2 |
| Banganapalle | 255 | 35,496 | 15·41 | 27,250 | – | 103 | 6 |
| Sandur | 161 | 11,388 | 8·12 | 4,500 | – | – | – |
| Total | 9,609 | 3,700,622 | 10·63 | 1,056,550 | 101,300 | 2,155 | 18 |

The first two States are under treaty engagements. The rest are guaranteed under deed by the British Government. The State of Travancore was consolidated out of a number of petty chieftainships during the last half of the 18th century. It was overrun by Tipu Sultan in 1789, an act which led to war between that Chief and the British Government, and in 1792 the former was compelled to disgorge the territory he had occupied. The Chief of Travancore then entered into a formal engagement with the British to pay for the presence and aid of a small force, including a company of European artillery. Since 1808, however, when there arose a rather serious insurrection, the State has been quietly and efficiently administered. The law of succession that prevails arises out of the practice of polyandry amongst the Nairs, to which community the reigning family belongs. The heritage here passes to the uterine brother, not to the son, of the Chief. If there be no such brother, the heir is the Chief's sister's son, or sister's daughter's son. The adoption, therefore, of a son, is not necessary, or indeed of any avail in this respect, so that ceremony is restricted to females, the collateral branches of the family. The late Chief, who succeeded his

INTERNAL STATES. (*Madras.*)

uncle in 1860, died in 1880, and was succeeded by his brother, who died in 1885. The nephew of the latter is now ruling; but had it not been for the adoption of a senior and junior Rani by the first-named, the line would have been legally extinct with this generation, for want of female transmitters. The Chiefs of Travancore have for some time been distinguished for their superiority in point of education to most of their rank. The State shows an increase of population during the last 10 years, amounting to 6½ per cent., but beyond sundry improvements in its judicial procedure, which was slow and uncertain, no events worthy of special note have transpired to break its steady though slow progress. *Cochin*, or Kuchi, is the neighbour of Travancore, on the Malabar coast, and is under a Chief claiming Rajput descent, whose ancestors formerly held the whole coast as far as the boundary of what is now the North Kanara district. It fell a prey to Haidar Ali, and was restored to the Chief by the British Government in 1792, under engagement of protection. After the suppression of a small insurrection, which took place in 1809, a subsidy was agreed to, in payment of a battalion of infantry to be stationed in the State, or, at least, to be within reach and available there whenever required. There has been little of importance going on in the State within recent times. The chiefship descends by the same rule as in Travancore, and the present incumbent is the brother of the last, and succeeded in 1888. The town of Cochin is within British limits, and the Chief's capital is at Trichur. The population of the State seems to share the general prosperity of that of the surrounding British territory. During the last 10 years it has increased by 20·4 per cent., which is in curious contrast to the low rate returned in Travancore, and to the medium of 12 per cent. in Malabar. Of the States lying in the other parts of the Madras Presidency, *Pudukottah* is the heritage of the Chief of the Kalla, a predatory and warlike tribe of southern India, known to the readers of Orme's History as the "Colleries." He used to be addressed by the title of Tondiman in the early days of the British connection. Neither he or the two smaller Chiefs in the more northerly part of the Presidency are under treaty engagements with the British, nor do they pay tribute. The Chief of Pudukottah came into notice during the operations against Trichinopoly, in 1752, and rendered useful services to the British forces engaged against Haidar Ali and local marauders. He was rewarded with the grant of the fort and district of Kilawelli. On more than one occasion the local authorities have had to intervene to protect the Chief against the consequences of his own prodigality or mismanagement, and some of his titles were temporarily struck off in consequence. These were restored in 1870. On the death of the late Chief in 1886, his grandson, a minor, was duly installed, with a minister, under the title of the Diwan Regent, to look after the State. The general supervision is now vested in the Agent, who is also the Collector of Trichinopoly. This State was affected by the famine of 1876–77, but that its population has recovered from that infliction is shown by the 23½ per cent. increase since 1881. *Banganapalle* is a small estate originally held on a sort of service tenure by a Musalman family under the Nizam. It passed with the Ceded Districts to the possession of the British, who restored it to the occupant, under guarantee of succession. For some time after 1825 it was in doubt whether, in consequence of disorder in the family and misadministration it would not be advisable to resume the estate and pension the incumbents, but finally, it was restored in 1848. The Nawab, a title conferred in 1876, has full civil and criminal jurisdiction, except that cases involving capital sentences have to be tried by the Agent, who is the Collector of Karnul. The present Chief succeeded in 1868.

The small State of *Sandur* is an *enclave* in the British district of Bellary. It was continued by the British Government to the Maratha family of the Ghorpade, who founded it when in the service of the Sultan of Bijapur. It contains the sanitarium of Ramandurg, rented from the Chief, over which the British authorities have police and magisterial jurisdiction. Neither here or in Banganapalle have there been any events in the last 10 years worthy of special note.

The most numerous and heterogeneous collection of States in India is that under the political control of the Government of Bombay. In the extreme

INTERNAL STATES. (*Bombay.*)

extreme north there is the sole relic of the possessions and power of the Talpur Amirs of Sindh. In the south are the Maratha States and those conferred by the Peshwa upon his Brahman generals and other officials of the Patwardhan family. Along the coast are the States of the Abyssinian admirals of the Musalman dynasties of the Deccan, and further to the north, both the Rajput clans descended from the ruling families of Hindustan and Rajputana, and the Musalman States created under the once powerful sway of the Ahmadabad Sultan. Lastly, in the inmost recesses of the forest that covers the hilly ground between the coast and the table-lands of the Deccan and Central India, are the chiefs of the Bhil and Koli tribes, secured in their possessions by British protection.

For convenience of administration most of these States are grouped into Agencies, whilst a few, such as Kachh and Sawantwadi, are sole charges. Then, again, some of the Agencies and States are under the control of a special officer, but most of the groups are administered or controlled by the Collector or chief civil officer of the adjacent district, who is *ex-officio* Agent. In the following statement of the area and population of these States and groups of States, those that come under the latter head are distinguished in *Italics*:—

| State or Agency. | Area in Square Miles. | Population. | | Approximate Revenue, 1892. | Tribute. | Military Force. | |
|---|---|---|---|---|---|---|---|
| | | 1891. | Increase per Cent. since 1881. | | | Men. | Guns. |
| | | | | Rx. | Rx. | | |
| Khairpur (Sindh) | 6,109 | 131,937 | 2·15 | 72,900 | — | — | — |
| Kachh | 6,500 | 558,415 | 9·04 | 180,400 | — | 1,800 | 164 |
| Kathiawar Agency | 20,559 | 2,752,404 | 17·42 | 1,728,140 | 69,680 | 15,450 | — |
| Palanpur | 7,775 | 645,526 | 11·97 | 142,150 | — | 1,477 | 18 |
| Mahi Kantha | 9,300 | 581,563 | 12·38 | 97,200 | 92 | 1,300 | 17 |
| *Rewa Kantha* and *Narukot* | 4,980 | 733,506 | 33·39 | 225,630 | 3,597 | — | — |
| *Cambay* | 350 | 89,722 | 4·23 | 60,450 | — | 449 | 12 |
| *Surat Agency* | 1,051 | 181,208 | 19·90 | 71,700 | 1,635 | 381 | 9 |
| *Dangs „ (Khandesh)* | 660 | 32,920 | 5·24 | 13,210 | — | — | — |
| *Surgana (Nasik)* | 360 | 12,308 | *—12·73* | 1,330 | — | — | — |
| *Jawhar (Thana)* | 534 | 52,831 | 8·80 | 15,000 | — | — | — |
| *Janjira (Kolaba)* | 324 | 81,780 | 7·09 | 47,050 | — | 303 | 168 |
| Sawantwadi | 926 | 192,948 | 10·61 | 42,000 | — | 400 | — |
| *Bhor (Poona)* | 1,491 | 155,669 | 6·71 | 42,240 | 465 | — | — |
| *Aundh* and *Phaltan (Satara)* | 844 | 131,529 | 12·11 | 54,200 | 960 | — | — |
| Jath | 979 | 79,786 | 43·77 | 19,700 | 640 | — | — |
| *Akalkot (Sholapur)* | 498 | 75,774 | 30·55 | 27,500 | 1,460 | — | — |
| *Savanur (Dharwar)* | 70 | 16,976 | 14·49 | 7,060 | — | — | — |
| Kolhapur | 2,816 | 913,131 | 14·11 | 330,600 | — | 2,208 | 67 |
| South Maratha Jagirs | 2,919 | 639,270 | 22·05 | 271,540 | 18,710 | 3,629 | 22 |
| TOTAL | 69,045 | 8,059,298 | 16·35 | 3,451,000 | 97,239 | — | — |

Most of the above States are situated in the northern or Gujarath division of the Presidency, and are under Rajput Chiefs, with a few Musalmans. It is out of the question to give more than a sketch in this review of the origin and history of these interesting political communities, though without some such addition it would be hardly possible to make the events of the decade intelligible.

The *Kachh* State, to begin with the most important, was founded by the Jadeja clan of Rajputs, and seems to have split off from the Sindh tribe, known as the Sammo, about the fifteenth century. The first few generations of the new dynasty seem to have been no different from their neighbours in the number and acrimony of their internal and family feuds. Offshoots of the main branch were driven across the Gulf, or Rann, and founded States in the opposite peninsula of Kathiawar. Early in the present century the British entered into engagements with the two *de facto* rulers of the State, chiefly with reference to raids on other States to the east, and piracy on the seas. As the provisions of this agreement were disregarded, a British

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force was marched into Kachh, and a portion of the State occupied till 1822, when it was restored. The opportunity was taken of using the British influence in the suppression of female infanticide, a crime for which the Jadeja clan was notorious. The arrangements made have been successful by the aid to a great extent of a fund out of which donations were made to the poorer members of the clan to enable them to marry off their daughters. In 1883 this fund was placed in abeyance, and its capital paid out till 1891, when it was exhausted. The State is now responsible, therefore, for providing means to prevent a recrudescence of this offence, which is not yet extinct, and showed signs of revival in 1891–92. One of the most fruitful sources of disputes in Kachh is the distribution of power between the Chief and the Bhayad, or those descended from the same ancestors as himself, who followed the fortunes of their leader, and settled on assignments of land in the State. In 1868 an attempt was made to demarcate the two interests, so as to maintain the general authority of the Rao, and yet not obliterate the admitted privileges of the feudatories. The scheme was discussed and amended, and finally sanctioned by the Local Government. Under it, existing holders of jurisdiction are classified on considerations of both property and intelligence, and a certain jurisdiction allowed to each, the remainder being reserved to the Chief, through a council on which the feudatories are well represented. In consequence of the number of Kachh merchants settled at Zanzibar, it became necessary to warn them of the penalties to which they rendered themselves liable if they engaged in slave-dealing with Mascat or other foreign ports. The Chief repeated the warning in 1872, and co-operated with the British efforts made in that year to suppress this traffic. The present Rao ascended the throne in 1876, and was invested with full powers in 1886. He visited England on the occasion of Her Majesty's Jubilee, and has done much to develop the capacities of Mandvi, his chief port, as a trading centre. So much of the land revenue is in the hands of his feudatories that the Chief is to a large extent dependent for State purposes on receipts from customs duties. It was, therefore, a greater concession on the part of the late Chief than on that of many of his brother rulers, to abandon, as he did, transit duties between different parts of his State. The unfortunate disputes regarding the Rao's rights in two or three of the small ports in the Gulf of Kachh, on the Kathiawar coast, which have given so much trouble for the last half-century, arise out of the relationship between the Chief and the rest of his family clan, amongst whom are counted the Chiefs of Morvi and Nawanagar, who have been for many generations independent in other respects. These disputes, and the internal difficulty of harmonising the respective rights of two of the parties in Kachh itself, which is by no means in abeyance, are the two principle obstacles to the progress of the State.

The Peninsula of *Kathiawar*, formerly known as Saurashtra, derives its present name from the Skythian tribe that settled in the Central Panjab, and are distinguished in history for the check they gave to Alexander the Great. In time they had to scatter and move south; and now constitute but a small fraction of the population of their eponymic tract. The peninsula simply swarms with Chiefs. In addition to the seven of the first class invested, that is, with power to try for capital offences generally, there are seven Chiefs of the second class, who have that power with regard to their own subjects only. Then there come five other classes of jurisdiction in which are grouped some 173 territorial tracts, each under some guarantee or other from the British Government, but in the case of about 130 or 140, so attenuated by subdivision that the civil and criminal jurisdiction has to be exercised by an official directly under the Agent. About one-fourth of the peninsula is liable, under the rules of partition wherever a chiefship is not recognised, to fall into this category, whilst three-fourths are preserved by the strict law of primogeniture. The largest State, Junagadh, is under a Musalman Chief, whose family acquired it from the former Rajput possessor in the middle of the 18th century. There are a few other Musalman States of small importance, with one or two under the Kathi tribe; but the bulk of the agency is under Rajputs, either Jhala, Gohel, or Jadeja. The head of the former is the Chief of Dhrangadra, who, like the Jadeja Chiefs, moved into Kathiawar from Kachh. The Jadeja clan acknowledge the

the Rao of Kachh as their head, though in Kathiawar the Jam of Nawanagar enjoys that local distinction. The Gohel clan settled in this part of the country some seven centuries ago, and the Chief of Bhaunagar is their head. The following statement shows the extent and general resources of the leading States in the Peninsula :—

| Kathiawar States. | Area in Square Miles. | Population, 1891. | Approximate Revenue, 1892. | Tribute (British and Baroda). | Military Force. | |
|---|---|---|---|---|---|---|
| | | | | | Men. | Guns. |
| 1st Class : | | | Rx. | Rx. | | |
| Junagadh | 3,280 | 484,190 | 240,000 | 6,660 | 2,238 | 10 |
| Bhaunagar | 2,860 | 467,282 | 350,000 | 15,450 | 2,860 | 15 |
| Nawanagar | 3,791 | 379,611 | 240,000 | 12,010 | 3,261 | 117 |
| Dhrangadra | 1,156 | 103,754 | 78,000 | 4,468 | 500 | 6 |
| Porbandar | 636 | 85,785 | 55,000 | 4,850 | 251 | 5 |
| Morvi | 821 | 105,335 | 10,000 | 6,160 | 1,174 | 2 |
| Gondal | 1,024 | 161,036 | 12,000 | 11,072 | 606 | 3 |
| 2nd Class : | | | | | | |
| Wankaner | 414 | 39,329 | 23,100 | | 143 | 2 |
| Palitana | 289 | 60,848 | 50,000 | | 407 | 7 |
| Dhrol | 283 | 27,007 | 15,000 | | 343 | 2 |
| Limdi | 344 | 48,176 | 26,400 | 13,502 | 183 | 2 |
| Rajkot | 282 | 49,938 | 20,000 | | 349 | 2 |
| Wadhwan | 236 | 42,438 | 42,500 | | 194 | 2 |
| Jafarabad | 42 | 12,389 | 6,000 | | 19 | 35 |
| TOTAL | 20,559 | 2,752,404 | 1,728,140 | 107,952 | 15,450 | 210 |

At the time of the first connection of the British Government with the Kathiawar chiefs, the crying evil was the method adopted by the Gaikwar of Baroda to levy the Maratha dues from the peninsula. This was known as "mulkgiri," or an annual armed expedition through the whole country to collect revenue, but not for protection or settlement of grievances. The amount of revenue to be collected varied according to the force available and the resistance that could be offered. To put a stop to this uncertainty and to pacificate the country generally, engagements were entered into by the British authorities and the leading Chiefs, in 1807. It was soon found that the administration of these Chiefs was to weak to allow them to carry out the terms of their contract, so far as keeping down crime was in question, so in 1831 a general court, with Chiefs as assessors, was established for the trial of the more serious offences. This again, owing to the nature of the political tenure of the land, had but slight effect, and men deliberately banded together to live by plunder in preference to abiding in their estates. In 1863, accordingly, the whole administration was reorganised. The Chiefs were classified as above mentioned, and the peninsula divided into four "Prant," or territorial sections, each under a European assistant to the Agent. The residuary jurisdiction in the case of the middle-class States was vested in these officers, and they exercised the same supervision over the subordinate or "Thana" officers, that would be required over the corresponding class in British territory. To settle disputes between the chiefs and their semi-feudal landholders, a special court was established composed of a British official as President, with six members, of whom two are chosen as assessors in each case. The same measures as were found necessary in Kachh against the practice of infanticide amongst the Jadeja Rajputs were enforced in Kathiawar with better effect than in the former State. From the beginning of the British control, the great difficulty has been the number of petty jurisdictional rights that facilitate the escape of criminals to a most dangerous extent. Outlawry has always been in the peninsula the last resort of the aggrieved, and in the more troubled times grew to a regular profession. In the present day much has been done to put a stop to it, but there are certain elements in Kathiawar that have to be constantly watched, lest they take the opportunity of a period of lax administration in the State to break out again. This has been the most serious feature in the history of the decade just past. At the end of 1882, for instance, a tribe of Maiyas, who had a grievance against the Junagadh

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State, after remonstrances to the authorities, retreated to a defensible position, and held out against the State police until a good many of their number were taken or killed, in circumstances of brutality that called for the serious notice of the Local Government. In 1885, the Gaikwar's Contingent was broken up, as related above, in connection with Baroda, and a local corps of police organised in its place, under a European Superintendent. This has had its effect on ordinary crime, but all the elements of the more violent forms of outbreak still exist, and in 1886 the state of Junagadh was so bad that a special officer had to be sent to hunt down outlaws and reorganise the State police. His services were subsequently extended to other States, and the assistance of two more officers was lent to him, so that in a little over two years the country was freed from the gangs then in operation. A general engagement was entered into by the Chiefs to further the capture of such outlaws by co-operation in the matter of pursuit and arrest in States other than that instituting the inquiry or where the offence was committed. This long-wanted step has no doubt tended to cut short the career of men who would, under the old system, have had a long and adventurous run before their capture. Nevertheless, particular classes, such as the Miana of the north, and the Makranis in the south of the peninsula, continue to give occasional trouble. In other respects Kathiawar is prosperous, and has recovered from the scarcity of 1878. It holds a high place as regards the number and efficiency of its schools. It is now very well provided with railways of which the greater portion has been constructed during the past decade, and Bhaunagar, Porbandar, and Verawal, are all ports that promise to attract considerable trade, and each now is connected by rail with the interior. There are two institutions for the training of the young Chiefs and Talukdars, several of whom have visited England more than once, and one has sat in the Bombay Legislative Council On the other hand, the intricacy of the political relations and settlements, with the pacification of the country, save in the matter of gang-robbery, appear to have whetted the Kathiawar appetite for litigation, and the peninsula has become notorious for the number of its disputes between Chiefs and their tenants or feudatories. Considering the number of States, there have been singularly few events of importance beyond what has been mentioned above. With the exception of Nawanagar and Dhrangadra, most of the larger States have passed through their period of administration by a British officer, owing to the minority of the Chief at the time of his succession. Junagadh lost its Nawab in 1892, and the succession had to be determined by the Government of India, who selected one of the three cousins of the late Chief. Bhaunagar has adopted the plan of a State Council, which developed in 1890 into a deliberative assembly. Porbandar, which had been reduced from a first to a third class State in 1869, was taken under direct administration in 1886, owing to the continued ill-conduct of the Chief. During this interregnum the development of the State has made rapid progress. In 1887–88 the State was restored to its position in the first class. So, too, in the case of the Thakur of Malia, who in 1880 was deprived of his jurisdiction, owing to his inability to manage his Miana population. In 1883 a partial restoration was made, but the Mianas are still under a special court, and the general administration is still too lax.

The *Palanpur* Agency contains two fairly large States, Palanpur and Radhanpur, both under Musalman Chiefs, and nine smaller ones. The first named was founded by a Lohani Afghan towards the end of the 17th century. It came under British protection about the same time and in the same circumstances as Kathiawar. Aid was given shortly afterwards in a family dispute about the chiefship, and finally a small subsidiary force was arranged for, with a certain degree of British supervision. Under an agreement of 1890 the obligation to maintain this force was foregone, on the understanding that the State police force should be organised on an efficient footing. The Radhanpur State dates from 1723, when a grant of land was made by the Viceroy of Gujarath to the Babi, as the family was then called. The State was plundered by the Gaikwar, but Radhanpur itself was left to them, and in 1813 the Chief entered into his first engagement with the British Government regarding his relations with the Baroda State. The present

present Nawab succeeded in 1874, and has been decorated by the British Government. Next in geographical position comes the *Mahi Kantha* Agency, containing but one considerable State, that of Idar, and 58 small ones, some of which are no more than a village or two. Idar was acquired by a scion of the Rathor clan, then in power at Jodhpur, who was governing Gujarath on behalf of the Dehli Emperor. For a generation or so Idar was shorn of the Ahmednagar estate, which was taken away by a successful revolt of a younger son. It was re-incorporated with the parent State in 1848. The present Chief succeeded as a minor in 1868, so that for more than a dozen years the State was under British administration. In 1887 he was decorated with the Knight Commandership of the Star of India. Most of the smaller chieftains in this Agency are either offshoots of Idar, or Kolis, representing the more powerful of the predatory gangs that hovered on the frontier of Gujarath before the province came under settled government. In the remote part of this tract the population are Bhils, and what with the proximity of places of refuge amongst the hills, and the stimulus received from their tribesmen across the Mewar frontier, they are apt to give trouble in a season of scarcity or high prices. In 1886-87 there was an increase in the number of gang-robberies on this account, but it is said that the tribes are gradually coming under the civilising influence of schools and of agriculture of a more systematic character than that to which they have hitherto been accustomed. The *Rewa Kantha* Agency, which adjoins the Mahi Kantha to the south, lies, as its name denotes, along the Narbada or Rewa, river, as its neighbour does along the Mahi. It is richer and more settled than the latter, though it contains no State of large area or population, as the following table shows :—

| State. | Area in Square Miles. | Population, 1891. | Approximate Revenue, 1892. | Tribute. | Military Force. | |
|---|---|---|---|---|---|---|
| | | | | | Men. | Guns. |
| | | | Rx. | Rx. | | |
| Rajpipla | 1,514 | 171,771 | 77,400 | — | 520 | 23 |
| Chote Udaipur | 873 | 93,637 | 23,060 | — | 306 | 4 |
| Lunawada | 388 | 90,147 | 23,500 | 1,200 | 496 | 40 |
| Balasinor | 189 | 53,215 | 13,960 | 1,299 | 230 | 5 |
| Baria | 813 | 111,269 | 27,100 | 1,070 | 288 | 3 |
| Sunth | 394 | 74,275 | 15,780 | 700 | 324 | 4 |

Rajpipla belongs to the Gohel clan of Rajputs, and fell a tributary to both the Moghal and the Maratha. The British Government admitted it in 1823 into the same arrangement as had previously been made with Kathiawar and the northern States. Since 1855 the State has been twice under direct administration, owing to the misgovernment of the Chief. The first period ended in 1858. The second, which commenced nominally in 1887, but practically in 1884, is still in progress. The State was in great distress and confusion, but has now been throughly well re-organised. The only outstanding cause of friction is the administration of the forest lands, which are here valuable. As in all similar cases, the wild tribes that inhabit such tracts put forward claims that are inconsistent with really efficient conservancy, but which cannot be disallowed without material change in their circumstances, a change which in dealing with such a class it is very difficult to bring about. Lunawada, Baria, and Sunth, of the larger States in this Agency, are all under Chiefs of a new generation, educated at the Rajkot College, and reported to take much part personally in the affairs of their States. Wadasinor, or Balasinor, too, an offshoot of the Babi family, is in a prosperous condition. All these Chiefs gave considerable assistance in the development of the trade of this part of the country by abolishing transit duties which were frequent and heavy, and facilitated, too, the work on the Godhra-Ratlam line of railway recently undertaken. There are no less than 58 small estates under various engagements in this Agency. Many belong to Bhils and similar wild tribes, which are under a separate charge. Their jurisdiction has not been classified, as has been that of their

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compeers in the Mahi Kantha, and some, moreover, have no jurisdiction at all. Narukot, which used to be under a separate Agent, is now combined with these, to which it is closely allied.

The States known as *the Dangs* are much of the same class. In the early days of British administration in Gujarath, the fifteen Bhil chieftains had claims, as they alleged, against the Gaikwar, which they were in the habit of prosecuting by raids on the open whenever supervision was withdrawn. To stop such proceedings, a guarantee of possession was given them by the British authorities, and the valuable forests in which they lived, were leased by the same Government. Their revenue is confined to that from such tracts of land as may be in occupation ; and their jurisdiction is chiefly exercised by means of fines of money and cattle. They are inveterate drinkers, and much in the hands, accordingly, of the Parsi liquor-shopkeepers of their neighbourhood. With the control of this trade and the opening of the forest tracts by through roads, it is hoped that these tribes will in time grow into more useful members of the community. *Surgana*, a State of but little higher class, lies to the south of the Dangs, but in the same belt of forest and low hills. *Jawhar*, again, still more to the south, and nearer the coast, belongs to the Koli tribe, but has been much improved during the present régime. The Chief was educated at Poona during his minority, and the State put on a good footing by direct management.

Returning to Gujarath, we have to notice one of the better known States in that Division, *Cambay*, founded by one of the last of the Ahmedabad Musalman Governors. It fell into the hands of the Peshwa, nominally, though the Nawab never seemed to have given any token of subordination, but, on the contrary, took every opportunity of levying his own tribute on the Maratha territory in the neighbourhood. The Peshwa's rights in Cambay fell, in their turn, to the British, who, however, interfered but little in the affairs of this State, except in the matter of the revision of the customs tariff, which was found complicated and onerous. In 1884 the British Indian tariff was introduced, and the Government of India abandoned all claim to the Maratha dues on this branch of revenue, contingent on the satisfactory administration of the same by the Nawab. During the last 10 years this State has suffered somewhat from the injudicious administration of a minister to whom, in consequence of the incompetence of the Chief, the fullest powers had been given. In 1890 there was an agrarian rising, due to an unfair use made of the new survey of the cultivable lands of the State which had just been completed. The chief town was besieged, and the Nawab forced to leave it. Military aid was called in from the nearest British cantonment, and order was not restored without some conflict and loss of life. A European Superintendent was appointed as administrator, who found a cash balance of one rupee and a few coppers, with Rx. 50,000 of debt. A loan from Government gave the State a fresh start, and it has since been recovering its prosperity.

Three small States remain to complete the account of those in Gujarath. They are all under the agency of the Collector of Surat. *Sachin* is held by a descendant of the Abyssinian admiral of the Musalman fleet, and an offshoot, therefore, of the State of Janjira further down the coast. It dates from the end of last century. The late Nawab succeeded his father in 1873, and until 1886 the State was under direct administration. In the latter year the young Nawab was associated with a Musalman gentlemen in the administration, but gave proofs of incompetence in six months, and then abdicated in favour of his infant son. The State thus passed again into the hands of the Agent, who administers it through an assistant pending the arrival of the heir at full age. *Dharampur* and *Bansda* are Rajput States, the former of the Sisodia clan, or that of the Udaipur house, the other, a Solanki. The Dharampur chief suffered from the passage of the Marathas through his territory on their raids on Gujarath, and had to pay the usual share of his revenues to that power. His territory lies on the route between Khandesh and Gujarath, so an arrangement has been arrived at whereby he abandons the levy of transit duties, collecting merely an import and export duty. The present Chief succeeded his father in 1891. Bansda is in the same position as its neighbour as regards the levy of transit duties. The Chief has been in power some 16 years, and his State is well administered.

On

On the Konkan coast, or that between Gujarath and Malabar, two States lie within the limits of the Bombay Presidency. The first, *Janjira*, has been already mentioned in connection with its offshoot, Sachin. It has also a detached offshoot, in Kathiawar, by the name of Jafarabad. The Sidi, or Abyssinian, Nawab held his territory successfully against the Peshwa, who was very anxious to get hold of the coast position opposite Bombay, but as early as 1733 there had been contracted an offensive and defensive alliance between the British and the Sidi, so when matters came to a crisis, by reason of the usual fraternal struggle for the State, the Bombay authorities arranged the dispute so as to leave no room for the intervention of the Poona government. In 1867, the Chief was deprived of all criminal jurisdiction for abuse of his powers, and in 1870 was formally deposed by his nobles, who claimed the right of interfering in cases of mal-administration. The Nawab was restored, however by the British Government. He died in 1879, and his only legitimate son succeeded him. The administration of the State has since that date been been much improved. *Sawantwadi*, the other coast State, is under a Maratha family, a branch of that of Shivaji, the founder of the Maratha power. The British first entered into engagements with the Chief to repress the piracies of the Angria, another coast chieftain to the north; but by the middle of the last century the same Government had to take strong measures against their ally, as he had begun piracy on his own account. There were occasional interventions on the part of the British in domestic disputes or disagreements with Kolhapur, and in 1819 the State was taken under protection. In 1838 the mismanagement of the Chief led to a temporary administration by the British Government, against which several times some of the local leaders revolted. In 1869 the Chief died, leaving a minor son. The latter, owing to bad habits and general misconduct, has not been allowed a share in the administration. The State, however, has made much progress since it was taken in hand, and the local corps, raised in 1839, is reported to be an efficient body of military police.

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The Maratha States above the Ghats are divided into three main groups: First, Kolhapur with its feudatories; second, the Satara Jagirs; and thirdly, the Southern Maratha Jagirs and the small Musalman State of Savanur. The *Kolhapur* State was severed from the possessions of Shivaji during the disputes as to the succession to the Satara throne which took place on the death of that great leader. Finally, Kolhapur was recognised as the appanage of the younger branch of the dynasty, and has since 1731 been considered independent of the elder. The first engagement between the British and this State was a commercial treaty in 1765, concluded after an expedition sent by the former to repress the piracy of vessels belonging to the latter. Negotiations followed on the same lines in 1792. The first guarantee of protection was signed in 1811, and in the next year the Chief, who had reigned 53 years, died, and some confusion ensued a few years later, which led to British expeditions on three occasions. In 1838 the misconduct of the then Chief's aunt, who had assumed the post of Regent, led to the appointment of a Minister by the British Government. Since 1866, the State has never had a Chief of full age. The very promising successor of Shivaji, the Chief who died in that year, fell ill whilst on a tour in Europe in 1870, and died, leaving no son or other heir. The leading members of the family were then authorised to select a Chief to be approved by the Government of India, and fixed upon a near relative of the late ruler. Before attaining his majority this youth became insane, and a Regent, one of his relations of known capacity, the Chieftain of Kagal, was appointed. The young Chief died in 1883, and the eldest son of the Regent was adopted by the widow of the deceased. The Regent himself died in 1886, and for a time the Agent succeeded him as President of the Council of Administration; but shortly afterwards, the Minister took up that post, with the two members of the Council as his colleagues. There has been great improvement in the State within the last 30 years or so. Roads have been constructed, a railway now connects the chief town with the main line of the South-Maratha system, and transit duties have been abolished since 1886-7. The State was much wasted by the famine of 1877, but the returns of the census of 1891 indicate its quick recovery.

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The *Southern Maratha Jagirs* consist chiefly of the assignments made by or under authority of the Peshwa to, first, one of his Maratha leaders of the Ghorpade family, a name well known in connection with Shivaji's struggles in the Deccan; secondly, to the Bhawa, another family of Maratha leaders; lastly, to the Patwardhan, who were first the family priests of the Peshwa, and subsequently took to the profession of arms, producing some of the best of the generals that fought in the great Maratha wars. On the overthrow of the Peshwa's rule, six families of Patwardhans were found in power, and engagements were entered into with the respective Chiefs to furnish a certain military contingent when required. In 1849 this was commuted for a cash payment. Sangli, the largest of the Patwardhan estates, was under a joint administration from 1873 to 1887, in consequence of the Chief's mismanagement. The latter was replaced in full authority in 1888. All these estates fell within the famine area of 1876–77, and suffered more or less severely, but have since been fairly well off. The new lines of rail have benefited them as well as the British districts by which they are surrounded. *Savanur* was originally granted by the Emperor Aurangzib to one of his Pathan followers, and taken possession of by Tipu Sultan, with whom the ruling family was connected by marriage. The Peshwa granted an assignment of territory when the ousted Chief sought his protection, and on the accession of the British, it was decided to treat the grant as a Jagir, or State, rather than as a mere pension. Complete civil jurisdiction was conferred on the late Nawab as a personal favour in 1860; and on his death it was ruled that the concession would not pass, as a matter of course, to his heir and successor.

The *Satara Jagirs* were guaranteed in the British treaty with the Chief of that State in 1819. They maintain no regular troops, and the chiefs have not the power of passing sentences of death, and all serious criminal charges are dealt with by a British official in association with the Chief or the delegate of the latter. At the present time, the Collector of Poona acts as the Agent for the Bhor State; the Collectors of Satara and Sholapur respectively, in the same capacity for Aundh, Phaltan, and Akalkot. Jath has been recently placed under the supervision of the Agent for the Southern Maratha Jagirs. The State of *Akalkot* was founded by the grandson of Shivaji, whilst fighting for his rights against Tarabai, the mother of another claimant. He assigned the grant to the son of one of his soldiers, adopting him, and giving him the name of his own family, Bhonsle. The British Government recognised the chief in 1820. In 1866 the mismanagement of the then Chief compelled Government to appoint an administrator, and, on his death in 1870, the State continued under direct management till 1889–90, when the young Chief was invested with a share in the management. At the end of 1890–91, full powers were given to him. During his minority the land assessment was settled, roads constructed and the courts of justice re-modelled. Nearly all the available land has been taken into occupation, and with the exception of the police, always the most backward part of an Indian administration, the whole of the arrangements of the State are reported to be in a satisfactory condition. *Aundh* and *Bhor* are the Jagirs of two of the chief Brahman officials under the Peshwa *régime*. Bhor belongs to the Pant Sachiv, the other to the Pant Pratinidhi. The former contains some valuable forests, which are of importance in connection with the head waters of the streams which supply some of the large irrigation projects of the Deccan. During the decade some steps were taken, accordingly, to get the conservation of such tracts placed on a fairly efficient footing. *Phaltan* is in the possession of a Maratha family which received the grant from the Bijapur Sultans. The protection of the British was extended to it at the same time as to Akalkot and Jath. In 1882 the Jagir was taken under joint administration owing to the embarrassments of the Chief, and in 1885, some relief having been effected, the latter was reinstated. *Jath* has been in pecuniary straits very nearly ever since 1827, when the Chief of Satara attached the Jagir. It was restored in 1841, but in 1872, again, the complaints of oppression made against the Chief by his subjects, rendered it advisable to deprive him of jurisdiction, and subsequently, of all share in the administration. In 1883 he was restored to a share in the management, and in 1885, to the whole. He did not

not fulfil, however, the promises he had made regarding the system of administration he was to adopt; so in 1891 he was again deprived of all authority. He died in the following year, leaving no heirs. His successor, a minor, has been since selected and his nomination sanctioned by the Government of India. INTERNAL STATES. (*Bombay.*)

## ADEN AND THE SOMALI COAST.

There are a few settlements and States detached from India and its frontiers which are nevertheless either administered by, or in political connection with, the Government of that country. In the first instance, we have Aden, with its dependencies, both in Arabia and Africa, which has been considerably developed in importance during the ten years under review. The original occupation of the Peninsula of Aden dates from 1839, when the first engagement was entered into with the Sultan of Lahej. Into the details of petty intertribal disputes that have occurred in the interval it is superfluous to enter in this place. In 1882 the extension of commerce and population of Aden itself rendered it advisable to purchase from Lahej the aqueduct through which the Settlement is supplied with water, and which had been constructed in 1867, together with the land adjoining it, with salt-pits and an area suitable for building sites. There is now a small settlement on this tract. At a greater distance from Aden than the Abdali of Lahej comes the warlike Fadthli tribe, which entered into negotiations after the capture of Aden in 1839. The object was to secure the route through the territory under this tribe for trade from the interior. Transit duties were abolished in 1872, in consideration of an increased subsidy from the British Government. There were tribal disturbances in 1883 and 1888; and in 1891 the Chief had to be fined and his subsidy suspended for misconduct, an Act which had the desired effect, and the survey operations that were carried out in 1891–92 were not hindered in any way. The relations with the rest of the 14 tribes connected with the Aden Residency were regulated by fresh engagements. There were occasional outbreaks of one against the other, and between claimants of the chieftainship, but, on the whole, nothing of especial interest or importance transpired. As regards the disputes between the two ports of Mokalla and Shihr, on the Hadthramat coast, it appears that after a cessation of hostilities in 1876, when the contending parties found that help from their relatives in the service of the Nizam of Haidrabad would be intercepted by the British Government, a truce was kept for three or four years. In 1880, however, the chief of Shihr captured Burum, which had been made over to his rival in 1873, but on the application of the latter for the protection of the British authorities at Aden, the town was given back. Having thus gained the object of the application to Aden, the Mokalla Chief repudiated the rest of the engagement, and finally was deported to Zanzibar, whilst the Jamadar of Shihr was placed in possession of both ports. He is now under subsidy, like his neighbours. The settlement of Aden, including the suburbs and Perim, has much increased in population and resources during the decade. In 1881 the population was 34,860; ten years later it was 44,079. The revenue in the year 1882–83 was returned as Rx. 9,724; in 1891–92, at Rx. 16,114. The trade returns for the two years show an increase from Rx. 4,265,000 to Rx. 7,530,500. The small settlement of Perim has become the seat of coaling companies, which does a considerable business, as in the year 1891–92 no less than 655 steamers called to coal there. The island of Sokotra, about 500 miles distant from Aden, was subsidised in 1876, and brought under protectorate ten years later. Two years later, in 1888, a similar agreement was entered into with the chiefs of the Maihri tribe on the opposite mainland, that being the parent community of the Sultan of the island. The Somali coast opposite Aden, in Africa, between Ras Jibuti and the 49° parallel, is under British protectorate, exercised through the Resident at Aden, with local assistants, one of whom is British Consul. The coast possesses three customs and eight flag ports, and, from the revenues of the three former, subsidies are paid to the chieftains of the main local tribes. In 1848, the territory ADEN AND THE SOMALI COAST.

ADEN AND THE SOMALI COAST.

territory under Zaila and Tajurra fell into the hands of the Sultan, but the Porte ceded in 1875 its possessions on this coast to the Khedive, who had gained a footing in Harrar, a tract of what would now be termed the "hinterland." The Egyptian Government found themselves unable to maintain their position here in 1884, and withdrew the garrison. Whereupon, the port of Zaila was occupied by the British, and that of Tajurra by the French, Governments. In 1887 the two Powers came to an understanding regarding their respective claims on this coast, and neither Government is, by this agreement, to interfere beyond the limits thus placed within its sphere of action. The caravan route from Zaila to Harrar, too, is to be kept open, and both parties are bound to do what they can to suppress the slave trade. In 1887–88, the towns of Zaila, Berbera and Bulhar were fortified to a certain extent, but next year, Berbera was burned down. It was soon, however, reconstructed, and this time on improved lines. In August 1889, the Mamasan Esa tribe attacked Bulhar, killing over 60 persons. To exact retribution for this raid, a force of about 300 strong marched through the whole of the tract occupied by that tribe. Little resistance was made, and most of the headmen voluntarily submitted. This event induced the authorities to take steps to organise a camel corps for the protection of life and property within a zone of 10 miles from the settlements. The trade of the ports on this coast is shown in the marginal statement. It has fallen off slightly during the last year, owing partly to political unrest in Harrar, where the Abyssinians from Shoa have been giving trouble, partly to cattle disease, which checked the exports of hides, here an important article of trade.

| Year. | Value of Trade of Three Chief Ports. |
|---|---|
| | Rx. |
| 1887–88 | 627,176 |
| 1888–89 | 784,975 |
| 1889–90 | 637,314 |
| 1890–91 | 752,496 |
| 1891–92 | 644,910 |

## THE PERSIAN GULF AND BAGHDAD.

PERSIAN GULF AND BAGHDAD.

The affairs of Turkish Arabia are but distantly related to those of India, though the Political Resident at Baghdad is appointed from the latter country. During the last 10 years there is not much of importance to note in this review. In 1880, the affairs of Nejd, or Central Arabia, which had previously been under the cognisance of the Agent for the Persian Gulf, were transferred to that of the Baghdad Agent, and in 1882 the official designation of the latter was changed from Agent to Resident. In 1848 it was agreed between Persia and Turkey that no fortifications should be placed at Fao, on the right bank of the Shatt-ul'arab River, but in 1886 the Turkish authorities began to build such works, and they are now said to be finished. In 1890 a British officer attempting to land at Fao was fired on by the Turkish garrison of the fort, but the officer in command of the works was severely punished, and the visit was subsequently allowed. The Porte was informed, however, that the British Government attached importance to the discontinuance of the fortifications, as it was one of the mediating powers in the negotiations prohibiting such construction.

Apart from the opening of the Karun River to navigation and the utilisation of the privilege by an English company, the chief interest in the Persian Gulf lies in its connection with the slave trade from the East Coast of Africa and the pearl-fisheries of Bahrain. The dealings with the Nejd, or Wahabi, tribes are mainly connected with the attacks by these last on the Maskat territories, and the Omán piracies, like the dacoities of Central India, depend a good deal on the harvest and partly too on the prospects of the pearl season. As regards the Slave trade, a strict watch is kept along the mouth and lower coast of the Gulf by the gunboats on this station, and a year seldom passes without a capture or two. But it appears from the number of boats in ballast that come up the Gulf that their cargo, including, of course, the slaves that probably formed the bulk of it, is landed at some point lower down the coast. The pearl-fisheries of Bahrain have long made that island a field of strife between Arab and Persian tribes. Even the Portuguese held it for a few years, but were driven out by the Persians. It is now under British protection. The Chiefs entered into

into treaty relations with the British in 1820, when the latter were on an expedition against the piratical tribes of the coast. They were thus enabled to hold out against the overtures afterwards made by the Porte for admitting the protectorate of the Turkish Government. Since 1867 there have been frequent disputes, ending in violence, about rights in the island, and claimants who have been formerly exiled have watched their opportunity to return with some mercenary allies from the tribes on the opposite mainland. The latest event in connection with the independence of Bahrain was the announcement to the Porte in 1891 that the British Government could not acquiesce in the establishment by the former of military posts on land hitherto recognised as a dependency of Bahrain on the Katar coast. The pearl fisheries vary much in productiveness, according to the season, and are resorted to by merchants from Sindh, as well as Persia and Arabia. The community of divers, too, alternate their labours here with trips to Ceylon and the neighbourhood, when the Manaar fisheries are likely to be extensive. The year 1891–92 was reported to be a highly remunerative one to the fishers along the west coast of the Gulf.

The Arabs of Maskat expelled the Portuguese in the middle of the 17th century from the Oman coast, and thereby established their supremacy in the Persian Gulf. By the end of the same century they had pursued the Portuguese down the East Coast of Africa, and driven them out of Mombassa and Zanzibar. A thriving trade in African slaves then sprang up between the two sections of the Sultan's dominions, and a variety of engagements have been contracted with a view to its suppression. The two portions of the Maskat territory, the Asiatic and the African, were separated in 1861, when there was a dispute between two heirs as to the feudal superiority of Maskat over Zanzibar, but the latter was ordered to pay an annual tribute to the former. A great part of the history of Maskat is taken up with the attempts on the part of the Sultan to possess himself of the Oman Coast on the one hand, and to defend himself against his relatives and their allies on the other. From 1879 till 1883, the State enjoyed comparative peace, but in the latter year, the brother of the Sultan made a further attempt on Maskat, and was not repulsed without some sharp fighting. From that time till the death of the Sultan in 1888, there was peace. He was succeeded by his second son, who had for some years shared the toils of government with his father. Several attempts have since been made by his uncle to overthrow him, but without success, and, finally, in 1891, the Sultan of Zanzibar offered the uncle, who had fled to Bombay, an allowance to live out of Zanzibar, and the Government of India warned him not to trouble Oman. This offer was accepted. A new commercial treaty was concluded with Maskat within the last few years. Gwadar, a port on the Makran Coast, was occupied from Maskat at the end of last century by one of the Saiads who had to fly after an unsuccessful attempt to overthrow his brother on the throne. It was seized by the reigning Sultan of Maskat in 1872, and has since been retained in his possession. Zanzibar, in spite of its distance from India, owes much of its trade to the enterprise of merchants from Kachh and Bombay, who have long been settled there, to the number, it is estimated, of 7,000. They have a claim which has been recognised, to British protection, and are amenable to British jurisdiction. One of them, recently deceased, was decorated before his death by Her Majesty, and the Sultan of Zanzibar, in recognition of the connection of his State with the British interests in India, has been made, since his accession in 1890, a Knight Grand Commander of the Star of India. Zanzibar, which was formerly under the political control of the Government of India, has been now placed directly under the Secretary of State for Foreign Affairs. At the same time, the whole responsibility for British relations with Maskat was vested in the former Government. The protectorate over his country was declared in November of the same year, and a few months afterwards the German coast-line was demarcated from that of the Sultan's dominions. The accession of the new Chief was signalised, too, by a decree directed towards the total abolition of slavery within or through his dominions. The events of the last year or two, however, prove that the traffic is not yet by any means at an end.

## CHAPTER III.

## THE ADMINISTRATION.

The Provinces.

THE Viceroy, as Governor General in Council, exercises supreme authority throughout India, subject always to the control of the Secretary of State, but his authority is not everywhere exercised in the same manner. As has been pointed out in the first chapter of this review, in the small provinces of Ajmer-Merwara, Coorg with Bangalore, Berar or the Haidrabad Assigned Districts, British Balochistan, and the Andaman Islands, he is himself the head of the executive. In the comparatively recently formed units of administration, such as Burma, Assam, and the Central Provinces, his authority is exercised through a Chief Commissioner, whose power and responsibilities are but little less than in the case of the Lieutenant Governors, to whom his authority is delegated in the Panjab and the two sections of the former Presidency of Bengal, namely, Bengal itself and the tract known with reference to the latter as the North-West Provinces, with which Oudh is now combined. Madras and Bombay are Presidencies, and stand in a different position from the above as regards the Governor General. They are administered by officers not deriving their authority from him, but appointed directly by the Crown, subordinated to him by express Act of Parliament. Each of them has a Governor and a Council, and during the whole or part of the period to which this review relates, a Civil Service, an Army under a separate Commander-in-Chief, and a Staff Corps of its own. The Governor corresponds directly with the Secretary of State, and, owing to the former independence of these Presidencies and their isolation from the east and north of India, together with the fact of their possession of separate legislatures, they have developed systems of administration which are in some important points respectively distinct from each other and from those that prevail in the territory more immediately under the Supreme Government.

Government of India.

This last is usually denominated the Government of India, in contradistinction to the Provincial and Local Governments or Administrations. It consists of the Governor General himself, with his Ordinary and his Legislative Councils, and the several branches of the Secretariat through which the work of the various departments of the administration pass, with their subordinate staffs. The seat of the Government of India is traditionally at "Fort William," in Calcutta, where it is still located from November to April, but between the latter month and October it migrates to Simla, in the Panjab Hills. The period occupied by the transfer of the establishments and such records as are required is generally utilised by the Viceroy and the members of his Executive Council in short tours and visits to different parts of the country.

The Governor General.

The Governor General or Viceroy, is appointed by the Crown, usually from among English statesmen of high rank. The term of office is indefinite, but in practice it is limited to five years. In strict theory, the Governor General is merely President of a Council, with a casting vote in case of equality, and certain powers of overriding the majority of the Council, or acting altogether independently of the Council, in urgent cases defined by statute. All his acts, whether executive or legislative, are expressed to run in the name of "the Governor General in Council." If the Governor General should visit any part of India unaccompanied by his Council, he is empowered to appoint some member of his ordinary Council to be President in his place; and there is a further power in such case to make an order authorising the Governor General alone to exercise all the executive powers of the Governor General in Council. As regards legislation, the express assent of the Governor General is required for every law, even though he may not have been present at the meeting of Council at which such law was passed. His personal assent is also required for all laws passed by the Provincial Legislature. Apart from his Legislative Council, the Governor General

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General is empowered, in "cases of emergency," to make ordinances "for the peace and good government" of the country which shall have the force of law for six months. His authority to overrule the majority of his Council is now regulated by the following clause (33 Vict., c. 3, s. 5) :—

"Whenever any measure shall be proposed before the Governor General of India in Council, whereby the safety, tranquillity, or interests of the British possessions in India, or any part thereof, are or may be, in the judgment of the said Governor General, essentially affected, and he shall be of opinion either that the measure proposed ought to be adopted and carried into execution, or that it ought to be suspended or rejected, and the majority in council then present shall dissent from such opinion, the Governor General in Council may, on his own authority and responsibility, suspend or reject the measure in part or in whole, or adopt or carry it into execution, but in every such case any two members of the dissentient majority may require that the said suspension, rejection, or adoption, as well as the fact of their dissent, shall be notified to the Secretary of State for India, and such notification shall be accompanied by copies of the minutes (if any) which the members of Council shall have recorded on the subject."

The authority of the Governor General in Council over the local Governments, including the Presidencies of Madras and Bombay, is now regulated by the following clause (3 & 4 Will. IV., c. 85, s. 65) :—

"The said Governor General in Council shall have, and be invested by virtue of this Act with full power and authority to superintend and control the Governors and Governors in Council of Fort William in Bengal, Fort Saint George [*i.e.*, Madras], Bombay and Agra [then intended to be constituted into a Presidency], in all points relating to the civil or military administration of the said Presidencies respectively, and the said Governors and Governors in Council shall be bound to obey such orders and instructions of the said Governor General in Council in all cases whatsoever."

The Governor General has a personal staff, consisting usually of a private secretary, an assistant private secretary, a military secretary, about six or eight aides-de-camp, of whom one or two are native officers, and a surgeon.

The Executive Council.

The Executive Council of the Governor General consists generally of five ordinary members, with the Commander in Chief as an extraordinary member, and the Governor of Madras or Bombay as additional extraordinary member, if the Council happens to meet within the limits of either of those Presidencies. The ordinary members are appointed by the Crown. The term of office is indefinite; but in practice it is limited, like that of the Governor General, to five years. Three of them must have served in India for at least 10 years; one must be a barrister or advocate; one may be "the member for public works purposes." As a matter of fact, one is always a military officer, and another is always appointed with reference to finance. Two, and often three, are selected from the Indian Civil Service. The presence of only a single member besides the Governor General (or a President nominated by him in his absence) is necessary to constitute a quorum. In accordance with rules made by the Governor General, he and his Council apportion between themselves the several departments of administration somewhat in the same manner as they are divided among the ministers of a European cabinet. The Legal, Public Works, Finance, and Military members have already been mentioned; the Governor General usually retains Foreign Affairs in his own hands, leaving Home, with Revenue and Agriculture, to the remaining member. These are the seven departments into which the Secretariat is at present divided; but, of course, the subdivision of functions in the Council is by no means so distinct as in the Secretariat. Each ordinary Member of Council is technically competent to do the work of any of his colleagues.

The Legislative Council.

The Legislative Council as it existed during the ten years under review, is composed of the Executive Council already described, with the addition of the Lieutenant Governor of the Province in which it may happen to meet, and from six to 12 other members, of whom not less than one-half must be non-official persons. These additional members are nominated by the

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Governor General for a term of two years. It has been customary that some of them should be natives of India. The quorum of the Legislative Council consists of six members, together with the Governor General, or an ordinary member of the Executive Council, as president. All members are equal with regard to the introduction of Bills and the right of voting, except that certain classes of Bills may not be introduced without the previous sanction of the Governor General, and that the President of the meeting has a casting vote. The meetings of the Legislative Council are open to the public.

By an Act of Parliament (55 & 56 Vict. c. 14), passed in June 1892, the constitution and scope of the Legislative Councils were considerably extended. Though the modification in question took place after the close of the period immediately under review, it will not be out of place to include a few lines about it, since it is the outcome of tendencies that have grown into prominence more within the last ten years than at any previous period in the history of the country. The anticipations formed thirty years ago from the introduction of the non-official element into the legislative constitution were amply fulfilled by the benefit derived by the Government from the experience and special knowledge thus made available. In consideration of the development of Local Government and of corporate action, municipal, commercial, and territorial, that has characterised the last twenty years, a similar advantage is presumably to be gained by further progress in the same direction. The Legislative Council of the Governor General has accordingly been expanded by four additional members to be nominated under rules framed by him, with the approval of the Secretary of State, with a certain latitude of interpellation. To a considerable extent, the representative principle has been recognised in respect to the nominations both to the Council of the Governor General and to those to the Councils of Madras, Bombay, Bengal, and the North-West Provinces. The large municipalities, for instance, groups of Local Boards, Chambers of Commerce, Senates of the Universities, and wherever such classes exist, bodies of influential landholders, or others of undoubted rank, whose interests are fairly homogeneous and are bound up with those of a considerable portion of the rural population, all these can be called upon to elect the representative whom they respectively propose for nomination. In the case of the remaining seats, which, so far as the non-official members are concerned, are the minority, the rules provide for the nomination of such persons as the Local Governments think will best represent the views of branches of the community not possessing sufficient power of combination to recommend a man of their own choice.

The Secretariat.

The Secretariat of the Government of India is divided into departments, which have varied greatly both in number and in the subjects assigned to them from time to time, as the sphere of Government increased. The present system dates from the time of Lord Ellenborough, and has been in existence, therefore, about half a century. At the outset, there were four departments, Home, Foreign, Finance, and Military. Lord Dalhousie added a fifth for Public works, when railways were being introduced, and much additional work was thus thrown upon the existing establishments. In Lord Mayo's time, the Department of Revenue, Agriculture, and Commerce, came into being, to be abolished in 1879, but only to rise again two years' later, shorn of the Commercial branch which remained with the Department of Finance. Finally, in 1869, the Legislative work was severed from the Home Department, and given to a separate Secretary. There are thus now seven Departments in the Secretariat of the Government of India. The titles of these speak mostly for themselves, but Finance deals with salt and opium, as well as with commerce and trade by sea, whilst trade by rail and river falls within the scope of the Revenue and Agricultural Department. The Military Department includes Marine affairs. The Foreign Department is concerned with the relations of the British Government with the Protected and Frontier States, and has thus to conduct the negotiations regarding extradition, extra-territorial jurisdiction and rights, and

and the passage of railways, canals, and lines of posts and telegraphs across these States. The comprehensive character of the Home and the Revenue and Agricultural Departments can be judged from the marginal enumeration of their respective branches. The Public Works Department has to deal not only with roads, bridges and buildings, but with all the different classes of railways, and with the rapidly increasing work in connection with the great system of canals, both for irrigation and navigation.

| HOME. | REVENUE AND AGRICULTURE. |
|---|---|
| Police. | Revenue. |
| Jails. | Surveys. |
| Justice. | Minerals. |
| Municipalities. | Agriculture. |
| Local Boards. | Emigration. |
| Medical. | Fibres and Silk. |
| Sanitary. | Meteorology. |
| Census. | Famine. |
| Ecclesiastical. | Horse-Breeding and Stock. |
| Education. | Fisheries. |
| Books, &c. | Museums and Exhibitions. |
| Examinations. | Rail and River-borne Trade. |
| Establishments. | Forests. |
| Public and Port Blair. | Archæology. |
| | Patents. |

But the departments of the Government of India are not limited to the subdivisions of the Secretariat, though the work of each of the former has to pass through some one of the branches of the latter. There are certain matters which for various reasons it is advisable to regard as Imperial, in respect to which the Supreme Government represents, as it were, the federal element amongst a collection of Provinces and States. All the functions not expressly delegated to the Provinces or States in question, together with all the matters in which more than one of the latter may be interested, appertain implicitly to the Government of India. So far as the Provinces are concerned, the differences in their position as regards the Supreme Government somewhat complicates their relations. As has been pointed out in the beginning of this chapter, Madras and Bombay stand apart, and of the rest, the Chief Commissionerships are in a degree more subordinate than the Lieutenant Governorships to the Government of India. The results of such distinctions may be seen in the administration of the Department of Public Works under the latter Government. The executive staff is here divided into a branch which includes the whole of the country, another which includes all but Madras and Bombay, and a third which also excludes the Lieutenant Governorships. The Military Department is in somewhat of the same condition. There is the Secretariat and the Member of Council, as well as the Commander-in-Chief and his Staff, and the latter has to deal with the whole of India in one capacity, and excludes the two Presidencies, Madras and Bombay, in another. It is much the same with the Ecclesiastical establishments, which appertain to the Government of India, save as regards the two Presidencies aforementioned and the military stations beyond their territorial limits which are garrisoned by the local Army. The Postal Department has its representative at headquarters in the person of the Director General of Post Offices, but its administration is provincial. The same may be said regarding police, jails, registrations, customs, excise, and stamps, which are unrepresented there. The Telegraph Department, however, seems to be uniformly treated, and to be administered on one system throughout India. The minor departments that come directly under the Government of India, such as the topographical, geological, and archæological surveys, the meteorological, the medical and sanitary, and others, are administered on the same lines as the rest, with greater or less centralisation, according to the special character of the work.

The Government of India has also the direct administration of the five small provinces of Ajmer-Merwara, Berar, Coorg with Bangalore, British Baluchistan, and the Andamans. The first four of these are administered much in the same way as the other and larger Provinces, and are dealt with through the Foreign Department of the Secretariat. The last consists merely of the Convict Settlement of Port Blair, and is thus placed under the Home Department.

The Provincial Government.

The actual administration of the country is vested in the Provincial Governments, of which there are, as already enumerated, eight. Two Presidencies, three Lieutenant-Governorships, and three Chief Commissionerships. In Madras and Bombay the Governor is appointed by the Crown, generally from among English statesmen, though more than once the choice has been made of an Indian official. The executive authority is vested in this officer and a Council consisting of two ordinary members also appointed by the Crown, and usually selected from the Indian Civil Service, with the Commander-in-Chief as an extraordinary member. By a legislative

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legislative provision, however, that has been under consideration since the close of the decade, the Presidency Army system will be abolished, and though the question has not yet been finally disposed of, it is probable that the chief military officer who is to take the place of the local Commander-in-Chief will not have a seat in Council. As the latter is at present constituted the Governor has a casting vote, and also the power to override a majority of his colleagues in cases of emergency. For legislative purposes the Council is augmented by the addition of the Advocate-General with from four to eight other members, raised under the recent Act to from eight to twenty, of whom not more than nine are to be officials, and all nominated by the Governor. At the close of the period under review the constitution of the Council being according to the former Act, there were four native members in Madras, and five in Bombay.

Of the three Lieutenant-Governorships, two have the assistance of a Legislative Council, that in the North-West Provinces having been constituted in 1886. Both will be affected by the new Act in much the same way as those of the Presidencies. In the absence of an Executive Council, the Lieutenant-Governor has the aid of a Board of Revenue in Bengal and the North-West Provinces, and of Financial Commissioners in the Panjab. The Chief Commissioner of Burma, too, has a Financial Commissioner to support him, but his compeers in Assam and the Central Provinces rule single-handed. There is a Secretariat in each Province, manned according to the administrative requirements. In the larger Provinces one of the secretaries bears the title of Chief Secretary, a distinction that was till recently allowed in the Presidencies alone. In Madras, in addition to the Council, there is a Board of Revenue consisting of four members, but no Divisional Commissioners, whereas in Bombay, Bengal, the North-West Provinces, the Panjab, the Central Provinces, Burma, and Assam, the Province is demarcated into territorial divisions, each comprising several of the districts, the constitution of which will be noticed below.

There are several departments in each Province organised on a uniform system, and managed by a special staff under the control and supervision of a chief at the head-quarters of the administration, but distinct from the ordinary executive establishments. For example, there is the Department of Public Works in its three main branches of railways, irrigation, roads and bridges, &c. Public Instruction, again, registration, police, jails, forests, surveys for revenue purposes, the postal service, sanitation, and medical aid and supervision. In the larger provinces the departmental system has to be extended to salt, excise and opium, and the littoral Provinces add to these the charge of marine affairs and customs. Special officers, too, are in charge of the several branches of the administration that have been mentioned above in connection with the Home and Revenue Departments of the Government of India, but which are not themselves distinctly departmental in the above sense of the term. Among these come such matters as agricultural training and inquiry, experimental farms, botanical gardens, meteorology, astronomy, archæology, horse-breeding, emigration, factory and boiler inspection, government printing, and the like.

Non-Regulation and Scheduled Tracts.

In the wide range of circumstances with which the Government of India has to deal, there have always been certain parts of the country which, owing to their unsettled or uncivilised state, it has been held advisable not to bring at once under the general system of administration that is found adapted to more peaceful and advanced communities. The practice of withdrawing such tracts from the operation of the Regulations under which the latter system was established began with reference to certain outlying tracts in Bengal in 1822, and was extended to others in 1833. Under the "Non-Regulation" system, as this is called, administrative and judicial functions were united in the same person, who was placed in the responsible position of exercising them, subject only to the control of the Governor-General. As new territory was acquired, repeated instances occurred in which the full provisions of the law as it prevailed in the settled valley of the Ganges were found inapplicable to the tracts newly annexed. In the Panjab the whole code of administrative and judicial procedure was the work of the first Chief Commissioner, John Lawrence, acting on the plenary authority delegated to him by the Governor-General, and there are other instances in which,

which, for a time, a similar intermediate stage of administration has served to bring the tract into line with the rest. The two main features of the Non-Regulation system were, first, that no legislative enactment was in force there unless it had been specially adopted under the authority mentioned above; and secondly, that all executive and judicial functions were vested in the same hands. The first provision still exists, though under changed nomenclature. By the Indian Councils Act of 1861 the rules that had been previously framed by the Governor-General in his executive capacity for the tracts in question were declared valid, and since that year the legislative system of India has been uniform throughout the country, and the procedure in the Non-Regulation tracts has been arranged and codified. But new tracts are frequently being brought under British administration to which the complete system of law is as inapplicable as it was to such circumstances in former times, so the legislative distinction is denoted by the term "Scheduled" tracts, or those for which it is left to the Governor-General to declare what Acts in the Indian Code are there current, whilst new legislation is effected by means of his power of making Regulations under the Act of 1861. The second feature of the Non-Regulation system, the union of judicial and executive functions, is one that must necessarily disappear as the tract gets settled and the complexity of the relations of its inhabitants with each other tends to increase. The separation in Civil litigation has been generally effected in Oudh and the Panjab, and to some extent in Assam, whilst progress in this respect is being made in the Central Provinces in proportion as the staff of officials is increased to relieve the executive of this portion of their duties. Two minor features of the Non-Regulation system may as well be mentioned here. First, that the superior staff in such tracts preserves a separate nomenclature from the rest, the whole body for each tract being constituted a Commission by itself, though often manned in the present day from the larger divisions of the services. The head of a district is thus called the Deputy Commissioner instead of the Collector, and the same title is used also for the corresponding official in the "Scheduled" tracts, such as Chutia Nagpur, Jalpaiguri, Darjiling, and the Chittagong Hills in Bengal, Kumaon in the North-West Provinces, and in one or two of the five districts of Sindh. Secondly, that owing to the paucity of civil officers at the time of constituting the Commissions above mentioned, the higher posts in the administration were not reserved for what is known as the Indian Civil, formerly the Covenanted, Service, but were locally recruited, either from nominees of the authorities in India, or from the Indian Staff Corps. The former practice is now in abeyance, and such appointments can only be made in special circumstances, and with the previous sanction of the Secretary of State; but the circumstances in the Panjab, Assam, and Burma are still such as to render on occasions military experience of considerable value in the administration.

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Apart from the surviving remnants of the distinction between the Regulation and the Non-Regulation systems, the administration is conducted on uniform lines throughout the country. The Province is divided, in the first place, into districts, of which there are 249, irrespective of the Andamans, British Balochistan, and the newly settled territory of the Lushai tribes, to the east of Bengal and Assam. These districts vary very considerably in area and population, as may be judged from the marginal table:—

Districts.

| Province. | Mean District. | |
|---|---|---|
| | Area. | Population. |
| | Sq. Miles. | |
| Madras | 5,882 | 1,455,747 |
| Bombay | 4,292 | 842,417 |
| Sindh | 9,358 | 574,355 |
| Bengal | 3,224 | 1,503,520 |
| North-West Province and Oudh | 2,194 | 957,247 |
| Panjab | 3,570 | 673,124 |
| Central Provinces | 4,806 | 599,127 |
| Upper Burma | 4,910 | 173,349 |
| Lower Burma | 4,885 | 248,795 |
| Assam | 3,769 | 421,295 |
| General Mean | 3,875 | 880,965 |

*Note.*—The three Agency tracts in Madras are counted as districts. The cities of Madras, Bombay, Calcutta, and Rangoon are omitted.

The Madras charge, it appears, is the heaviest in India, taking into account both factors. The extremes in point of area are the Simla district in the Panjab, with its 102 square miles, and the Upper Khyndwin in Burma, which covers approximately 19,000. The range of population, again, is equally wide, for, against the hill district of North Arakan, with 14,600 inhabitants, there has to be set that of Maimansingh, with its 3,472,000.

The district forms the unit of administration, and is placed under an officer known as the Collector, or, as above mentioned, the Deputy Commissioner. He is the local representative of the Government, and, with the exception of the highest

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highest judicial authority, which is, as a rule, vested in a judge, he exercises all administrative functions or is responsible for their due exercise by others. As implied by his title of Collector, his primary duty is that of a revenue officer, in which capacity he superintends the administration of the land so far as the State rights in it are concerned, and the collection of the State dues from excise, stamps, and other sources. In addition to his functions in connection with the revenue, he is the chief Magistrate in his district, and as such, besides exercising criminal jurisdiction himself, he is bound to supervise the exercise of that jurisdiction by the magistrates subordinate to him as well as the action of the police in respect to crime and their other duties. All the departmental work carried on within his jurisdiction is subject to his supervision in its local branches, so that he has to look into the condition of the jails, schools, roads, hospitals and dispensaries, forests, registration, and anything else that may be undertaken in the district. If he be not the presiding officer of the Municipalities and local Boards he has to exercise a general supervision and control over their procedure. He is the political Agent for any small States that may be embedded in or adjacent to his charge, and is the medium of communication between them and the local Government. Besides all this, he has to supply that Government with all the information that may be called for regarding the condition of his district, economic, social, sanitary, or political, and, indeed, on any other subject in regard to which the views of the illiterate nine-tenths of the population have to be taken into consideration. In order to keep touch with the masses, and to see that the machinery of the administration is working efficiently and with no undue friction, the district officer is required, as a rule, to travel about his charge for some portion of the year. The period fixed as a minimum differs in each Province, according to the system of administration of the land revenue, but the duty which is usually regarded by the incumbent as a privilege, is, no doubt, one of the highest importance, not only on account of the information gained from its performance, but still more by reason of the information thus imparted to the villagers that the responsible representative of the Government is a being endowed with sympathies and intelligence, and not merely a traditional machine for signing official orders. The district officer is aided in the fulfilment of his functions by a staff of assistants and deputies, varying in number, title, and rank, according to the Province. Their duties, too, are distributed differently, as in some the judicial element predominates, in others, the inspectional. Everywhere, however, their subordination to the head of the district is complete, and they have to perform such duties as he may allot to each.

District Sub-Division.

The District is subdivided for administrative purposes into the charges of subordinate officers, constituted mainly with reference to the land revenue, except in Bengal, where, owing to the permanency of the settlement, magisterial and police considerations predominate. Throughout the rest of India the subdivision is generally known as a Tahsil, or Taluka, under a Tahsildar, or Mamlatdar, or in Sindh, a Mukhtiarkar, who has both revenue and subordinate magisterial powers. To him is attached, to a great extent, the responsibility in matters of detail, so that, next to the district officers, his post is that which touches most nearly the rural population. In Bengal the subdivision, as there known, is larger than the Tahsil, and has no revenue significance, and the Thana, or police unit, ranks next in administrative importance. In Burma, the tract under a Myok, which is known as a township, corresponds, from an administrative point of view, with the subdivision, or Tahsil, but it is again subdivided, not into villages like the latter, but into revenue circles under a Thugyi, comprising, it may be, a number of villages. In the village, elsewhere but in Bengal, is found the unit of revenue and police administration. It differs, like all other Indian institutions, from tract to tract, but its tendency is towards the status of a self-sufficing community of agriculturalists with the simple subdivision of labour that suffices for their daily life. It has its headman, who usually holds small police powers, its accountant, who records and accounts for the State dues on account of assessment and other items of revenue, and its watchman, and other menials. In Bengal, the village system has not been thoroughly established east of Bihar, except as regards the watchman, and in Assam,

Assam, the unit is simply that for which one person has contracted to collect the land-assessment. ADMINISTRATION.

Omitting certain departmental and technical posts, the Civil administration was conducted by four services during the period under review or the greater part of it. The distribution and nomenclature were modified to some extent in accordance with the recommendations of the Public Service Commission of 1888, of which mention will be made below. The first class of those in civil employ is that of the Covenanted Service; the second is the Statutory; and the third the Uncovenanted Service. The fourth and last comprises the military officers from the Staff Corps who are engaged in Civil work. The terms Covenanted and Uncovenanted, which have now ceased to exist, had become inapplicable long before their abolition. The first was derived from the agreement signed by the Civil Servant on his appointment, there being no bond required in the case of the other class. But as the exigencies of the Indian administration expanded, it was found necessary to have recourse to Europe for the supply of men to fill posts for which suitable incumbents could not be obtained in the country itself. Education, meteorology, engineering, forestry, telegraphy, and others all had claims that could not be met otherwise than by arrangements concluded in England, on terms which, though not so comprehensive and formal as those of the Civil Service, as then understood, were sufficient to place the signatory in a position different from that occupied by the functionaries of a class that could be recruited in India. The title Statutory was given to those natives of India who are appointed directly, by local nomination, under Act 33 Vict. cap. 3, sec. 6, to the higher posts otherwise reserved to the Covenanted Civil Service. The Administrative Services.

The Indian Staff Corps was formed in 1861 by Royal Warrant, when the army of the East Indian Company was amalgamated with that of the Queen. It consists of a body of military officers, with special rules of pay, pension and promotion, recruited partly from officers of the Company who had already occupied certain posts, partly from officers of the Crown, after passing certain examinations, and recently from officers drafted direct from the Royal Military College. It has been stated above that in the non-regulation tracts the Commission indented largely upon the Staff Corps for district officers, and in the Panjab, Assam, and Burma this source of recruitment is still open, whilst the Political Department has always trusted largely to this corps for its supply of Agents and Residents at the headquarters of the protected States. Till within the last few years Madras and Bombay had each its separate staff corps, but now the title, Indian Staff Corps, covers the whole, as the Indian Civil Service has absorbed the former titles derived from the three Presidencies. The Staff Corps.

As regards this last, with its complementary body, now known as the Provincial Service, which has succeeded to the local titles of the former, it will not be out of place, considering the modifications lately introduced, to interpolate a short paragraph on its history and development. This service is derived from the staff of merchants, factors and writers employed by the East India Company when its functions in India were purely commercial. For some six years after the Company had received a political status in the country, the administration of the revenue and justice under the *diwani* grant in Bengal, Bihar, and Orissa, was left in the hands of the native subordinates to whom it had been entrusted by the Musalman authorities. In 1772 the Company began to take the administration in their own hands, and in 1790 and 1793, the direct administration of all branches of the public service by European officers was placed on a clear and permanent basis. All civil posts beneath the rank of members of Council were reserved to this service, and the promotion to any of them was regulated by seniority of appointment. A college was set up in Calcutta soon after for the training of junior civilians in law and Oriental languages, but no provision was made regarding their education before joining this institution till 1806, when the Haileybury College was established. Admission to this college was obtained on nomination by the Court of Directors of the Company, and, after a two years' course of study, the qualifications of the Candidates were tested The Indian Civil Service.

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tested by means of examinations. In 1853 the principle of regulating admission to the college by open competition was laid down, but in the course of the discussion which took place regarding the best means of giving effect to this provision, a recommendation was made that this institution should be no longer maintained. Then came the transfer of the Government of India from the Company to the Crown, on which occasion the principle of recruitment by means of open competition was re-affirmed. It is not necessary to refer here to the alterations made at various times in the ages between which competition or admission respectively should be allowed, or to those affecting the scope of the examinations. It suffices to say that a high value was throughout attributed to a course of University study and discipline, as it is understood in England, the open question being whether that course was more profitably undergone before or after admission to the special training required before final selection for the service.

The reservation to the civil service of the Company of all civil posts under its administration was obviously one that could be maintained in its integrity no longer than whilst the sphere of action was limited to the circumstances of the time at which it was prescribed. The exigencies of the administration resulting from the acquisition of fresh territory on the one hand, and the extension of the obligations of the State in the more settled tracts on the other, were met by the nomination to the reserved posts of many Europeans and natives, who did not belong to the Company's civil service, in the restricted sense of that term. The appointments thus made were validated by Act 24 & 25 Vict. cap. 54. As regards the unreserved posts, it has been stated above that numbers have had to be filled by nomination or competition in England; several, though very few, are still left to nomination of Europeans in India, and the majority are recruited by various methods from amongst the natives of that country.

The Statutory Civil Service.

As regards the admission of the latter, it was enacted in 1833 under 3 & 4 Will. IV., cap. 85, sect. 87, that "no native of the said territories (India), nor any natural born subject of His Majesty resident therein, shall by reason only of his religion, place of birth, descent, colour, or any of them, be disabled from holding any place, office, or employment, under the said (East India) Company." The great extension of the system of State instruction that has since taken place, together with the establishment of Universities in the five principal towns of India, soon supplied the Governments with a wide and amply-stocked field of selection for most of the offices other than those usually held by members of the Covenanted Service. For this last, however, in spite of the removal of disabilities of race or creed, up to 1870, only one native of the country had successfully competed. In that year, therefore, an Act was passed (33 Vict. cap. 3), under which natives of India of proved merit and ability could be employed in the civil service of Her Majesty in India without entering that service in the manner provided in the Act for the Government of India, 1858. The rules under this Act, which had to be sanctioned by the Secretary of State, were at first drawn up so as to confine the field of choice to those who had proved their merit and ability by their previous service in the subordinate ranks of the service of the Crown, but a revised code was afterwards sanctioned, in which this restriction was removed. One or two appointments only, and those to the judicial branch of the service, were made under it. The subject was reconsidered in 1879, and fresh provision made, under which the recruitment by this means could extend up to one-fifth of the total number of civilians appointed in the year, and the nominee should be on probation for two years after his selection. A most important point was prominently brought by the Government of India in promulgating these rules to the notice of the local authorities who had the duty of selecting the nominees; namely, that, in their opinion, the appointments should, generally speaking, be confined to young men of good family and social position, possessed of fair abilities and education, to whom the offices open to them in the inferior ranks or uncovenanted service, had not proved a sufficient inducement to come forward for employment, whilst the appointment of men already in the

the service of Government, or in the practice of a profession should be quite exceptional, and confined to persons who had obtained great distinction in their former career. This recommendation was based on the experience of the results of the extension of public instruction, as above mentioned. Advantage of the new system had been taken to the full by the sedentary or literate classes, who, except under the Brahman Peshwas, and as financiers and accountants under the Musalman rule, had been debarred from reaping the whole benefit of their intellectual superiority. But the ruling classes of the Hindus, and still more markedly, the upper grades of the foreign community that was in power immediately before the introduction of the British régime, kept studiously aloof from institutions that would bring them into rivalry, and probably an unsuccessful one, with the classes whom they had so long regarded as their inferiors in position and capacity. In a very few years, however, it was found that the attempt to introduce the latter element into the administration by the above means was a failure, as men could not be got who combined high social position with the requisite intellectual and educational qualifications, and the men who were appointed were in many cases of a class that would have been content to have been provided for in the lower grades of the public service, above which their qualifications in either sense, social or intellectual, did not rise. In consideration of the fact, therefore, that through the scheme inaugurated under the Statute of 1870, the end which it had been the wish of the Government to attain, whether on the ground of political expediency or of administrative advantage, had been in no way furthered, it was determined to institute an inquiry by means of a Commission on which the natives of India should be as adequately as possible represented, with the object of devising a scheme which might reasonably be hoped to possess the necessary elements of finality, and to do full justice to the claims of natives of India to higher employment in the public service. The Report of the Commission was submitted to the Government of India in December 1887. It has since been presented to Parliament along with the correspondence relating to the action taken on the proposals it contains. No lengthy comment is therefore necessary regarding it in this review. The main provisions are the division of the Civil Service into two sections, the Indian and the Provincial, as already stated above. The first it was proposed to recruit by open competition in England, as heretofore, "keeping it as a *corps d'élite*, reduced to such numbers as will suffice to fill the chief administrative posts, allowing for a reserve to be filled by juniors in training for such appointments." Since the close of the period to which this review relates, however, a Resolution has been passed by the House of Commons to the effect that "all open competition examinations heretofore held in England alone for appointments to the Civil Services of India shall henceforth be held simultaneously both in India and England, such examinations in both countries being identical in their nature, and all who compete being finally classified in one list according to merit." The Government of India was asked by the Secretary of State to inform the latter in what mode and under what conditions and limitations this Resolution could be carried into effect, compatibly with the essential condition that an adequate number of the members of the Civil Service shall always be Europeans. The matter is thus still under consideration. As regards the statutory appointments already made, as above described, under the Act of 1870, the alternative has been offered to the incumbents of either entering the Provincial service, with a preferential claim, other qualifications being duly considered, to the higher appointments to be made available for that service, as will be mentioned below, or else, of remaining in their present posts, outside any organised service, and therefore, without any claim to promotion on the ground of seniority, but only on that of special merit and ability.

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The Provincial Civil Service.

The Provincial Service, so far as it relates to judicial and executive posts, is admitted under the new scheme to certain appointments otherwise reserved to the Indian Civil Service, in accordance with rules made under the Act of 1870, in supersession of those of 1879, above quoted. In the same way, natives of India who are not already in the Provincial Service, can be appointed to the above posts, provided that they do not exceed a

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certain proportion to the members of the local Provincial Service. The lower grades of the present Uncovenanted Service have been constituted a subordinate Civil Service, with the privilege of promotion to the Provincial Service in case of conspicuous merit. The special or technical branches of the Service in question are to be dealt with after the re-organisation of the two sections which are the most extensive and important, the Judicial and the Executive.

Strength of the Services.

As to the present constitution of the services, it appears that since 1874 the Indian Civil Service has been reduced by 22 per cent. in numbers, with the prospect of a further reduction of 12 per cent. In January 1892, including the statutory appointments, it contained 983 members, of whom 15 were natives admitted on open competition in England, and 59 were appointed under the Act of 1870. Of the 15, 10 belong to the two main literate castes of Bengal, three are Parsis of Bombay, one is of a Madras trading caste, and the last belongs to a local commercial community of Musalmans in Bombay. Excluding the juniors in training and the men employed in Burma, there were at the time the Commission made their report, 765 civil charges in India held by members of the Indian Civil Service, by members of the Staff Corps, and by those of the Uncovenanted Service who had advanced to this rank in the Non-Regulation Provinces. This, it is calculated, gives to an average charge an area of 1,004 miles, and a population of 274,279. To increase this would be incompatible with efficient administration, for, as has been pointed out by the Secretary of State, the above services represent the only permanent English official element in India. It appears, indeed, that several of the officials thus employed are natives of that country. If we turn to the record of the provincial, or uncovenanted, service at the time in question, it will be found that in the higher grades of the Judicial and Executive branches, out of 2,588 persons employed, 2,449 were natives of India, and only 35 were Europeans not domiciled there. There were 104 Eurasians and domiciled Europeans, and the rest comprised 1,866 Hindus, 514 Musalmans, chiefly in Upper India, 18 Sikhs and 21 Parsis, with 30 unspecified by religion or race. The analysis of the 1,866 Hindus, again, is interesting, as that general title gives no clue as to the class to which the persons in question belong. It appears that of the above number, 904, or nearly half, were Brahmans, 113 were Banias or of the trading caste, and 601 writers. It is true that some of the last are shown under the title of Kshatria, or warrior, but from the locality where they are returned it is clear that they belong to local writing castes, which claim, at some distance, affinity with the military. Over 80 per cent. therefore belong to castes which, in their aggregate, amount only to some 4½ per cent. of the population, for the bulk of the Brahmans in the North-West Provinces and Oudh are agriculturist and illiterate, and may be here grouped, accordingly, with the rest of the masses. Finally, the Commission states that out of 114,150 appointments in the Civil Departments carrying an annual salary of Rx. 100 and over, 97 per cent. are now held by natives of India, and the remaining 3 per cent. by others.

Cost of General Administration.

The head of "General Administration" in the financial accounts includes four main divisions, and one for the transactions of Local Funds. In addition to these, all of which refer to charges incurred in India, there are the expenses coming under this head on account of the India Office and stores from England. The following statement of all this expenditure during the year 1891–92 will explain the arrangement and details. It may be pointed out that the first subdivision refers to the heads of the administration; the second to the Councils and Secretariat; the next to the cost of intermediate supervision, and the fourth to financial control. The executive alone is here in question, and judicial and fiscal offices are omitted. The former is debited to the head of "Law and Justice," and the latter to "Land Revenue" or its special departmental head. In the case of the district and subdivisional staff, the cost is equally distributed, except in Madras, between the two heads just mentioned, in consequence of the dual functions of the officers concerned as Collectors and Magistrates.

## Details of Charges of General Administration, 1891–92.



| Head. | India and England. | Bengal. | Assam. | North West Provinces and Oudh. | Panjab. | Central Provinces. | Burma.† | Madras. | Bombay. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Governor General | 25,080 | – | – | – | – | – | – | – | – | 25,080 |
| Governors | – | – | – | – | – | – | – | 12,000 | 12,000 | 24,000 |
| Lieutenant Governor | – | 9,600 | – | 9,600 | 10,073 | – | – | – | – | 29,273 |
| Chief Commissioners and Commissioner in Sindh | – | – | 4,428 | – | – | 4,800 | 7,680 | – | 11,842§ | 28,750 |
| Staff and Household* | 23,502 | 2,165 | 307 | 3,802 | 2,122 | 600 | 1,790 | 13,528 | 20,352 | 68,168 |
| Darbar Fund | 16,551 | – | – | – | – | – | – | – | – | 16,551 |
| Total A. Rx. | 65,133 | 11,765 | 4,735 | 13,402 | 12,195 | 5,400 | 9,470 | 25,528 | 44,194 | 191,822 |
| Executive Council | 39,182 | – | – | – | – | – | – | 12,717 | 12,576 | 64,475 |
| Legislative Council | 20,180 | 1,816 | – | 233 | – | – | – | 1,612 | 100 | 23,941 |
| Military Secretary and Establishment | 43,794 | – | – | – | – | – | – | 6,163 | 8,050 | 58,007 |
| Public Works Secretary and Establishment | 29,969 | – | – | – | – | – | – | ‡ – | ‡ – | 29,969 |
| Civil Secretariat | 124,077 | 51,939 | 8,144 | 30,196 | 21,309 | 9,768 | 24,053 | 32,203 | 37,624 | 339,313 |
| Tour Charges* | 15,249 | 3,110 | 652 | 4,422 | 4,563 | 1,161 | 478 | 149 | 1,647 | 31,431 |
| Total B. Rx. | 272,451 | 56,865 | 8,796 | 34,851 | 25,872 | 10,929 | 24,531 | 52,844 | 59,997 | 547,136 |
| Board of Revenue, Financial Commissioners, &c. | – | 28,863 | – | 25,653 | 23,082 | – | 7,553 | 18,418 | – | 103,569 |
| Commissioners and Establishments | 127 | 53,743 | 5,143 | 51,019 | 34,136 | 19,246 | 39,465 | – | 22,766 | 225,645 |
| Total C. Rx. | 127 | 82,606 | 5,143 | 76,672 | 57,218 | 19,246 | 47,018 | 18,418 | 22,766 | 329,214 |
| Comptroller General, Accountant General, &c., and Establishment | 39,156 | 36,496 | 5,180 | 21,260 | 17,193 | 7,349 | 19,361 | 25,372 | 26,635 | 198,002 |
| Accountant General, Public Works, &c. | 22,571 | – | – | – | – | – | – | – | – | 22,571 |
| Paper Currency | 11,050 | 24 | – | 1,343 | 1,145 | 5 | 2,035 | 2,578 | 7,875 | 26,055 |
| Reserve Treasury | 505 | – | – | – | – | – | – | 303 | – | 808 |
| Presidency Banks | 16,335 | 1,437 | – | – | – | – | – | 3,216 | 7,529 | 28,517 |
| Total D. Rx. | 89,617 | 37,957 | 5,180 | 22,603 | 18,338 | 7,354 | 21,396 | 31,469 | 42,039 | 275,953 |
| Local Funds, General Establishment | 129 | 29,217 | 259 | 5,315 | 12,492 | 2,756 | 1,106 | 27,531 | 10,493 | 89,298 |
| GRAND TOTAL IN INDIA Rx. | 427,457 | 218,410 | 24,113 | 152,843 | 126,115 | 45,685 | 103,521 | 155,790 | 179,489 | 1,433,423 |
| Stores from England | 19,560 | – | – | – | – | – | – | – | – | 19,560 |
| Charges in Home Accounts, including Exchange | 338,334 | – | – | – | – | – | – | – | – | 338,334 |
| GRAND TOTAL CHARGES Rx. | 785,351 | 218,410 | 24,113 | 152,843 | 126,115 | 45,685 | 103,521 | 155,790 | 179,489 | 1,791,317 |

* In Madras and Bombay, the sums of Rx. 9,000 and 9,300 respectively, on account of tour expenses, are debited to staff and household.
† The special charges debited to Upper Burma were Rx. 19,445, for Commissioners and their establishments.
‡ There are Public Works secretariats in Madras and Bombay, but their cost is not separately returned.
§ This item evidently includes more than the cost of the Commissioners in Sindh.

ADMINISTRATION.

The Table given below will facilitate comparison between the figures for last year and those for the corresponding period 10 years back:—

COMPARATIVE STATEMENT of the Cost of General Administration.

| YEAR. | India. | Madras. | Bombay. | Bengal. | North Western Provinces and Oudh. | Punjab. | Central Provinces. | Assam. | Burma. | TOTAL in India. | In England, including Exchange, from 1886-7. | GRAND TOTAL. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1881-82 - - | 422,329 | 136,693 | 164,469 | 182,750 | 148,499 | 123,953 | 40,485 | 21,728 | 42,019 | 1,262,925 | 231,431 | 1,494,356 |
| 1882-83 - - | 425,784 | 143,506 | 169,450 | 189,738 | 140,685 | 127,912 | 40,688 | 22,787 | 44,501 | 1,314,046 | 249,836 | 1,563,882 |
| 1883-84 - - | 419,457 | 142,390 | 174,757 | 196,600 | 159,249 | 137,650 | 54,374 | 25,641 | 49,007 | 1,359,025 | 239,354 | 1,598,379 |
| 1884-85 - - | 431,001 | 147,084 | 176,336 | 201,330 | 162,317 | 129,850 | 56,127 | 23,007 | 47,857 | 1,374,909 | 234,930 | 1,609,839 |
| 1885-86 - - | 468,118 | 148,036 | 173,310 | 198,241 | 161,704 | 122,379 | 42,459 | 22,496 | 50,931 | 1,387,674 | 345,235 | 1,732,909 |
| 1886-87 - - | 432,288 | 149,066 | 175,859 | 200,547 | 160,907 | 126,925 | 45,638 | 23,203 | 77,836* | 1,392,269 | 341,606 | 1,733,875 |
| 1887-88 - - | 421,424 | 143,973 | 177,814 | 199,361 | 157,166 | 122,541 | 46,581 | 24,834 | 95,827 | 1,389,521 | 380,414 | 1,769,935 |
| 1888-89 - - | 415,238 | 144,588 | 174,013 | 209,033 | 161,319 | 118,970 | 43,754 | 23,798 | 100,711 | 1,391,419 | 353,737 | 1,745,156 |
| 1889-90 - - | 418,506 | 149,715 | 175,430 | 215,793 | 155,318 | 119,263 | 44,605 | 27,419 | 105,669 | 1,411,718 | 347,475 | 1,759,193 |
| 1890-91 - - | 414,507 | 149,472 | 176,053 | 213,462 | 161,856 | 125,766 | 43,822 | 25,057 | 103,304 | 1,412,299 | 328,166 | 1,740,465 |
| 1891-92 - - | 427,457 | 155,790 | 179,489 | 218,410 | 152,843 | 126,115 | 45,685 | 24,113 | 103,521 | 1,433,423 | 357,894 | 1,791,317 |

* Upper Burma annexed.

It appears that whilst the revenue administered has expanded by 25 per cent., the growth of the charges for general administration, excluding exchange, has been at just half that rate. It is scarcely worth while to compare the results for the different Provinces, since the system of administration is so far from being uniform. The marginal Table, however, gives the percentage of these charges on the revenue collected, and the incidence per head of population in the first and last years respectively of the period under review, including the charges of Financial Control. The incidence on the revenue has fallen except in Bengal and Burma. As regards that on population, Assam is stationary, whilst to Bengal and Burma, the Central Provinces must be added as showing a slight increase. The notable reduction in the revenue incidence in the Panjab is due to the great expansion there of the local receipts from railways and canals. In Bengal the revenue was almost stationary, as the increase from railways was almost counterbalanced by the decrease from opium. The Burma incidence has risen in accordance with the increased responsibilities consequent upon the annexation of the Upper Division of that Province, which outweighs the lowering influence of the rapid growth of population in the Lower Division. As compared with 1881–82, the only change in the order is that Madras has fallen below Assam, and Bengal and the North-West Province have changed places.

| Province. | Percentage on Revenue. | | Incidence per Head. | |
|---|---|---|---|---|
| | 1881-82. | 1891-92. | 1881-82. | 1891-92. |
| | | | Rx. | Rx. |
| Madras - - - - | 1·43 | 1·37 | ·0044 | ·0043 |
| Bombay - - - - | 1·47 | 1·36 | ·0092 | ·0095 |
| Bengal - - - - | 0·94 | 1·10 | ·0028 | ·0036 |
| N.-W. Prov. and Oudh - | 1·63 | 1·33 | ·0033 | ·0032 |
| Panjab - - - - | 2·69 | 1·60 | ·0065 | ·0060 |
| Central Provinces - - | 2·82 | 1·94 | ·0041 | ·0042 |
| Assam - - - - - | 2·73 | 2·31 | ·0044 | ·0044 |
| Burma - - - - - | 1·57 | 2·03 | ·0112 | ·0136 |
| TOTAL, including Home Charges | 2·14 | 1·88 | ·0075 | ·0076 |

## IV.

## LAW AND LEGISLATION.

Law and Legislation.

The description and history of the subject of this chapter was fully given in the Decennial Report for the period ending with the year 1882-83, so it has been reproduced here with merely the additions and modifications required to bring the account up to the year 1892.

Adopting the recognised language of jurisprudence, the law of India may be described as either written or unwritten. The unwritten law consists of (1) the customary law of England, including both common law and equity, in the technical sense of those terms; (2) the customary law of the natives of India, whether Hindus or Muhammadans, or belonging to neither of those classes; (3) a certain *liberum officium*, expressly authorised by the phrase "in cases not provided for the court shall act according to justice, equity, and good conscience." The written law consists of several classes of legislative enactments: (1) the Statutes of the Imperial Parliament, and in a special sense those passed before 1726; (2) Regulations of the Governor General and Council from 1773 to 1833; (3) Acts passed by the Governor General in Council from 1834 to the present time. In addition, there must be added, as of only local application, the Regulations of the Governor and Council of Madras from 1800 to 1833, of the Governor and Council of Bombay from 1807 to 1833, the Acts of the Governor and Council of Madras, of the Governor and Council of Bombay, and of the Lieutenant Governor and Council of Bengal, from 1862 to the present time, and the Regulations of the Governor General in his executive capacity under the provisions of 33 Vict. c. 3.

The application of these several kinds of law varies to some extent according to place and person, though much has been done in recent years to promote uniformity. Roughly speaking, it may be said that European British subjects are amenable, so far as regards personal rights, to the law of England, whether written or unwritten, except when that law has been modified by express enactment. The same law, unless modified, has special application to all persons within the limits of the three Presidency towns, Calcutta, Madras, and Bombay; and also within the limits of Rangoon. Similarly the natives of India, Hindu, Musalman, or other, are amenable, so far as regards succession, inheritance, marriage, caste, or religous usage, each class to their own law, except when modified by express enactment. Parliament and the Governor General in Council can legislate for the whole of India; the legislation of the Provincial Councils is, of course, local.

Parliament.

The Imperial Parliament has always refrained as much as possible from legislating directly for India. Scarcely one Act passes in a Session that would properly be called a law for India. But indirectly the effect of Parliamentary legislation upon India has been very great. In the first place comes the long series of constitutional enactments which have been already described. It is from these enactments that the Councils in India derive their own legislative power. In the second place, by a curious process of legal interpretation, the entire body of English law existing in 1726, both written and unwritten, so far as applicable to local circumstances, was introduced at one stroke into the three Presidency towns, as the result of the establishment of Mayors' Courts in that year by Charter from George I. The jurisdiction of the Mayors' Courts passed to the Supreme Courts established at Calcutta in 1772, at Madras in 1800, and at Bombay in 1823, and was enlarged by Act of Parliament from time to time. It is now exercised by the High Courts of Justice, which superseded the Supreme Courts in 1862, and has been specially applied to Rangoon as "the law administered by the High Court in the exercise of its ordinary original civil jurisdiction." As may be readily imagined, it is not always an easy question to decide whether these old statutes are indeed "applicable to local circumstances." Mr. Whitley Stokes, in his Col-"lection of Statutes relating to India" published in 1881, gives a list of nine statutes passed before 1726 which have been expressly held not to apply

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to India; and he also prints at length 34 other statutes passed before 1726, which he believes, with more or less certainty, to apply to India. As regards the statutes passed since 1726, there is less difficulty. The recognised rule of construction is, that only those statutes apply which extend to India either expressly or by necessary implication. A few have been directly applied to India by the Local Legislature.

The Regulations.

The Charter of Elizabeth in 1601, incorporating what afterwards became the East India Company, gave power to make "laws, constitutions, orders, and ordinances," and to inflict fine or imprisonment for disobedience. A similar power is contained in the series of Charters which renewed the first. No rules made in pursuance of this power are known to exist; but they may be presumed to have had reference to the internal organisation of the Company's factories and to mercantile business. The need for legislation proper was not felt until the Company became a territorial sovereign by the cession of the *diwani* of Bengal in 1765. After a few years' trial of the Native Government the Company resolved in 1771 to "stand forth as Diwan" by the agency of its own servants. Warren Hastings was appointed to inaugurate the new system; and the regulations he promulgated in 1772 for the administration of civil and criminal justice are to be regarded as the first attempt at British legislation for India. Meanwhile the affairs of India had come under the consideration of the House of Commons. The statute passed in 1773, known as the Regulating Act (13 Geo. 3, c. 63), besides establishing a Governor General and founding a Supreme Court, conferred an express power of legislation upon the Governor General and Council of Bengal. Regulations made in pursuance of this power were not valid unless registered in the Supreme Court; and this proviso led to serious difficulty. The earliest regulation bears date 17th April 1780. In 1781 a second Act of Parliament was passed (21 Geo. 3, c. 70), empowering the Government to frame regulations for the Provincial Courts of Justice without reference to the Supreme Court. It was under this statute that the greater number of the so-called "regulations" were passed; and so far as they exceeded the limited authority thus conferred, the defect was cured by a subsequent statute (37 Geo. 3, c. 142). The special object of the last-mentioned statute was to recognise the Bengal Code of Regulations, itself known as Regulation XLI. of 1793. It was thereby required that all regulations should be registered in the Judicial Department, that they should be printed, that they should be translated into the vernacular languages, that the grounds of each should be prefixed to it, and that all should be formed into a Code. The power of legislation at Bengal remained substantially as thus settled down in 1833. The Governor and Council of Madras first received power to frame regulations by 39 & 40 Geo. 3, c. 79, and the first Madras regulation dates from 1802. At Bombay the power was assumed as early as 1799, but was not confirmed by statute until 1807 (47 Geo. 3, Sess. 2, c. 68). Excluding certain enactments referring to the settlement of the land revenue, it may be said, in the words of Sir James Stephen, that "the regulations are now almost entirely swept away by more modern legislation."

The Indian Legislature.

In 1833 the Indian Legislature was reconstituted by Act of Parliament (3 & 4 Will. 4, c. 85). The Governor General in Council was empowered to legislate for the whole of India, leaving to the Governors of Madras and Bombay the right only of proposing draft schemes. Acts thus passed were liable to be disallowed by the Court of Directors, and were also required to be laid before Parliament, but no registration in India was necessary. It was expressly enacted that they should have the force of Acts of Parliament. A fourth member was added to the Council, who might only sit and vote at meetings for making law. At the same time an Indian Law Commission was appointed, composed of the legislative member of Council, another English member, and one civil servant from each of the three Presidencies. The Law Commission drafted the Penal Code, which did not receive the legislative sanction until 1860, and compiled many volumes of reports. The laws passed since 1833 are known as Acts, not regulations. The mode of citation is to give the calendar year and the number of the Act.

Twenty years later (1853) the Indian Legislature was again remodelled (16 & 17 Vict. c. 95). The fourth or legislative member was made an ordinary member of Council. At least six additional members were appointed to take part in legislative meetings only. Two of these were to be the Chief Justice and a puisne Judge of the Calcutta Supreme Court; the others were civil servants nominated by the Provincial Governments. Henceforth the Legislative Council held its meetings in public, and its debates were regularly reported. By the same statute a body of eight Commissioners were appointed in England to report upon the reforms proposed by the Indian Law Commission. LAW AND LEGISLATION.

The constitution of the Legislative Council, as subsisting during the period under review, was regulated by the Indian Councils Act of 1861 (24 & 25 Vict. c. 67). By this Act the power of legislation was restored to the Presidencies of Madras and Bombay, and a Legislative Council was appointed for Lower Bengal, while the Governor General in Council retains legislative authority over the whole of India. For legislative purposes the Governor General's Council consists of the ordinary members, the Commander in Chief as extraordinary member, and the Governor or Lieutenant Governor of the Province in which the Council happens to meet, together with from 6 to 12 members nominated for a period of two years by the Governor General. Of these last not less than one-half must be non-official persons, and in practice some of them are always natives of India. The extent of the powers of the Legislative Council are thus defined: "For all persons, whether British or native, foreigners or others, and for all "courts of justice whatever, and for all places and things whatever, within "the Indian territories now under the dominion of Her Majesty, and for all "servants of the Government of India within the dominions of Princes and "States in alliance with Her Majesty." Certain subjects are expressly reserved for Parliament, including the several statutes regulating the constitution of the Indian Government, any future statute affecting India, any statute for raising money in England, the Mutiny Act, and the unwritten laws and constitution of England so far as regards allegiance and sovereignty. No measure may be introduced without the sanction of the Governor General if it affects the public debt or revenues, the religious usages of the people, military discipline, or foreign relations. No law is valid until the Governor General has given his express assent to it; and an ultimate power of signifying disallowance is reserved to the Crown. In cases of emergency the Governor General, apart from the Legislative Council, may make "ordinances for the peace and good government" of the country, which have the force of laws for six months. Local Legislatures were constituted for Madras and Bombay, in addition to the ordinary Councils, consisting in each presidency of the Advocate General, together with from four to eight other persons, of whom one-half must be non-official, nominated by the Governors. Besides the subjects forbidden to the Governor General's Council, these Local Legislatures may not take into consideration proposals affecting general taxation, the currency, the Post Office and Telegraphs, the Penal Code, patents or copyright. The assent of the Governor General is necessary to give any law validity, as well as the assent of the Governor. A similar Local Legislature was directed to be constituted for the Province of Bengal, and power was given to constitute Legislative Councils for the North West Provinces and for the Panjab, and for any other Lieutenant Governorship that may be formed hereafter. A similar Council was accordingly established in the North West Provinces and Oudh by Royal Warrant, on the 9th of November 1886. It consists of the Lieutenant Governor and nine members, of whom four are officials and five non-officials. Of the latter four are natives of the Province. The Indian Councils Act, 1861.

The enlargement of these Councils, in accordance with Act 55 & 56 Vict. c. 14, has been described in the preceding chapter. The Council of the Governor General cannot, under this enactment, consist of less than 10, or more than 16, additional members. The Councils of the Governors of Madras and Bombay, in addition to the Advocate General of the Presidency, are limited to between 8 and 20 such members. In Bengal the Council nominated by the Lieutenant Governor is also limited to 20, and that in the

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North West Provinces to 15, members. Certain classes and bodies are allowed the privilege of recommending a member as their representative in the Council.

The process of legislation.

The actual work of legislation in the Council of the Governor General is conducted as follows. Though any member may introduce any measure, subject to the prohibitions already mentioned, the formal part of the process of lawmaking is generally left to a special department of the administration, which was formed out of the Home Department in 1869. This Legislative Department consists of a Secretary, who is *ex-officio* Secretary to the Legislative Council, with a subordinate staff. It is his duty to prepare all Bills required, in consultation with the member of Council in charge of the Bill. After being printed and introduced into Council, the Bill is then circulated among the Provincial Governments, and also among others whose opinions on it may be desired. It is also translated into the main vernacular languages of each Province to which it has been referred, and published in the "Gazette." When the replies of those consulted have been received, the Bill is then submitted to a special committee of the Council, who examine it in private, clause by clause. If many alterations are made in committee, the Bill is sometimes printed and circulated a second time. Finally, the Bill is taken into consideration at a public meeting of the Council, when amendments may again be introduced, and is there passed after open debate. There are no definite sessions of the Council according to English usage, so that the passage of a Bill cannot be interrupted by anything except its defeat, even though that passage may be protracted over years. The procedure in the Local Council is conducted on the same lines. Under the new statute a certain latitude of interpellation is allowed; the question must be submitted for approval a certain time beforehand to the President, who may disallow it if he thinks it advisable so to do, or may have it answered, whether the propounder put it or not. There can be no discussion on the answer.

The subject-matter of legislation.

The subject-matter with which Indian legislation is most concerned has been arranged by Sir James Stephen under five heads: (1) Acts which embody the fundamental principles of the British Government, such as the suppression of *sati*, infanticide, and slavery, and the regulation of marriage and inheritance in cases of conversion to Christianity; (2) Acts which codify parts of the unwritten law; (3) Acts relating to judicial procedure; (4) Acts relating to the revenue, especially the land revenue; (5) Miscellaneous Acts. The Penal Code of 1860, the Succession Act of 1865, and the Contract Act of 1872, may be mentioned as examples of the second of these classes, and the great Civil and Criminal Procedure Codes as examples of the third.

The publication of Indian law.

The work of the Legislative Department is not confined to the drafting of Bills. Ever since its formation it has also been engaged in reducing the existing body of law to an intelligible form. This process has two sides; first, the expurgation of the Statute Book by the repeal of obsolete enactments; second, the arrangement of the remaining enactments according to their source and their local application. The result is a series of 19 volumes, known as the revised edition of the Indian Statute Book. Two of these volumes, with a supplement, contain all the Imperial Statutes relating to India from 1285 to 1881; six other volumes contain the general Acts of the Indian Legislature from 1834 to 1888; 11 volumes, with a supplement, contain the Codes for each of the several Provinces, *i.e.*, so much of the old Regulations as are unrepealed, together with subsequent Acts of only local application. Though the above volumes are not published "by authority," their accuracy is guaranteed by the Legislative Department.

Regulations for scheduled tracts.

A few lines may be added in explanation of a complicated distinction in the local application of Acts of the General Legislature which has its origin in what is called the non-regulation system of administration on which some comment was made in the last chapter. This system grew up out of a desire not to subject certain backward or unsettled tracts to the same rule of impersonal law that was applicable to the country generally. In

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In later times, when new territory was acquired by conquest or cession, the same principle was applied. The Governor General, in his executive capacity, assumed legislative functions or delegated them to the local administration. In this way a body of law was formed, as, for instance, in the Panjab, which was based to some extent upon the Bengal Regulations, but consisted for the most part of an elastic judicial and administrative system without express legislative sanction. All technical difficulty as to the past was removed by a section in the Indian Council's Act of 1861; and the local laws of the most important Non-Regulation Provinces—the Panjab, Oudh, and the Central Provinces—have since been re-enacted by the Legislature. But the practical needs that produced the Non-Regulation system have now found expression in another form, or rather in two other forms. In the first place it has been provided by an Act of Parliament (33 Vict. c. 3) that the Governor General, in his executive capacity, may make "Regulations" on the suggestion of the Local Government for such tracts as the Secretary of State shall declare to be proper for such mode of legislation. In the second place, an Act of the Indian Legislature, known as the Scheduled Districts Act (XIV. of 1874), has set apart in a schedule a number of tracts, as to which the Local Government is left to decide what laws are in force, what laws are not in force, and what laws in force in the rest of India should be specially introduced. The former method, it will be seen, is available for providing new legislation for the "scheduled" Districts. The latter is available for extending to them legislation already in force elsewhere. Upper Burma, British Baluchistan, Assam, about six Districts of the Panjab, Kumaon in the North-West Provinces, Chutia Nagpur in Bengal, and Sind, are the most important examples of scheduled tracts. Between 1883 and 1892 (both years inclusive) 55 Regulations were made by the Governor General under the provisions of 33 Vict. c. 3.

Acts of Parliament relating to India, 1882 to 1892.

All the Acts of Parliament relating to India, directly or indirectly, up to 1881, will be found in Mr. Whitley Stokes's "Collection of Statutes" published in that year.

The following 52 statutes passed since the publication of the above collection have been republished by the Government of India as having special reference to that country:—

| Year. | Reign. | Chapter. | Subject. |
|---|---|---|---|
| 1882 | 45 & 46 Vict. - | 45 | Bombay Civil Funds. |
| ,, | - ditto | 79 | India (Home Charges, arrears). |
| 1884 | 47 & 48 Vict. - | 33 | India Marine Service. |
| 1884–85 | 48 & 49 Vict. - | 25 | East India, unclaimed stocks. |
| ,, | - ditto - | 28 | East India Loan. |
| 1887 | 50 Vict. - - | 10 | Duke of Connaught's leave. |
| ,, | 50 & 51 Vict. - | 11 | Conversion of India Stock. |
| ,, | 51 Vict. - - | 5 | Oudh and Rohilkhand Railway (Purchase). |
| 1889 | 52 & 53 Vict. - | 65 | Council of India reduction. |
| 1890 | 53 Vict. - - | 6 | South India Railway (Purchase). |
| 1892 | 55 & 56 Vict. - | 14 | India Councils Act, 1892. |
| 1882 | 45 & 46 Vict. - | 55 | Merchant Shipping (Expenses). |
| ,, | - ditto - - | 76 | Merchant Shipping, Colonial Inquiries. |
| 1888 | 51 & 52 Vict. - | 24 | Merchant Shipping, Life-saving Appliances. |
| 1889 | 52 & 53 Vict. - | 43 | Merchant Shipping, Tonnage. |
| ,, | - ditto - | 46 | Merchant Shipping, 1854 (Amendment). |
| ,, | - ditto - | 73 | Merchant Shipping, Colours. |
| 1890 | 53 Vict. - - | 9 | - ditto. |
| 1891 | 54 & 55 Vict. - | 31 | Mail Ships. |
| 1883 | 46 & 47 Vict. - | 30 | Companies (Colonial Registers). |
| ,, | - ditto - | 58 | Post Office (Money Orders). |
| 1884 | 47 & 48 Vict. - | 31 | Colonial Prisoners Removal. |
| 1884–85 | 48 & 49 Vict. - | 49 | Submarine Telegraph. |
| ,, | - ditto - | 74 | Evidence by Commissioners. |
| 1886 | 49 & 50 Vict. - | 33 | International Copyright. |
| ,, | - ditto - | 43 | Medical. |
| ,, | 50 Vict. - - | 3 | Amending Submarine Telegraph Act. |
| 1889 | 52 Vict. - - | 10 | Commissioners for Oaths. |
| ,, | 52 & 53 Vict. - | 52 | Official Secrets. |
| ,, | - ditto - | 63 | Interpretation. |
| 1890 | 53 & 54 Vict. - | 27 | Colonial Courts of Admiralty. |
| ,, | - ditto - | 37 | Foreign Jurisdiction. |
| 1891 | 54 & 55 Vict. - | 50 | Amending Commissioners of Oaths Act. |
| 1892 | 55 Vict. - - | 6 | Colonial Probates. |
| ,, | ditto - - | 10 | Short Titles. |
| ,, | 55 & 56 Vict. - | 40 | Superannuation Act, 1892. |

There were also 11 annual Army Acts, and five Statute Revision Acts. Of the 11 Acts referring more especially to India, the most important, that relating to the Council's Legislature has been already noticed, and none of the others need special comment.

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Legislation in India.

The following statement shows the extent of the work of the Legislative Councils, with the number of Regulations passed by the Governor General for Scheduled districts and the Statutes applied, during the last 10 years:—

| YEAR. | Governor General's Council. | | Presidency Councils. | | Lieutenant Governor's Councils. | | Statutes applied. |
|---|---|---|---|---|---|---|---|
| | Regulations. | Acts. | Madras. | Bombay. | Bengal. | North-Western Provinces and Oudh. | |
| 1883 - - | 2 | 16 | 4 | 6 | 5 | — | 8 |
| 1884 - - | 3 | 21 | 7 | 2 | 5 | — | 3 |
| 1885 - - | — | — | 3 | 4 | 3 | — | 5 |
| 1886 - - | 26 | 86 | 4 | 6 | 3 | — | 4 |
| 1887 - - | — | — | 1 | 7 | 5 | 1 | 5 |
| 1888 - - | — | — | 3 | 6 | 3 | — | 2 |
| 1889 - - | 4 | 20 | 4 | 1 | 4 | — | 8 |
| 1890 - - | 9 | 20 | 3 | 5 | 3 | — | 7 |
| 1891 - - | 7 | 22 | 1 | 2 | 2 | 1 | 4 |
| 1892 - - | 4 | 10 | 2 | 3 | 1 | — | 6 |
| TOTAL - | 55 | 195 | 32 | 42 | 34 | 2 | 52 |

Regulations.

Some of the more important of the above enactments may be briefly described. First, as to the Regulations. The earlier ones in the list relate chiefly to police matters in Assam and jurisdiction on the Sindh frontier, &c. Of those passed in 1886, 11 related to the newly annexed territory of Upper Burma, for which a complete code of civil, criminal, revenue, and municipal law had to be provided. The Ajmer-Merwara municipal laws were enlarged and improved, and an important Regulation relating to Assam settled the status of the landlord there, defined his rights, and consolidated into one code the provisions of some 40 previous Regulations, along with much new matter. In 1889 the collection of revenue in the Surma Valley of the same Province was facilitated by a special Regulation, and a somewhat similar matter received attention in Coorg. The administration of British Balochistan was placed on a systematic footing by four Regulations of 1890, and, as in preceding years, some additions to the code, mainly regarding Criminal and Civil Procedure, and Forest Administration, were found necessary in Upper Burma. A good many of the other Regulations refer to procedure on the Panjab Frontier, where murders are apt to grow in frequency unless special measures be taken against the offenders more suitable to the class of inhabitants than the regular routine of the plains.

Two years' Legislation.

The extent and variety of the subjects with which legislation in India has to deal can best be appreciated through the enumeration and brief description of the enactments passed during the last two years, 1891 and 1892, beginning with those that occupied the attention of the Council of the Governor General. In 1891, as the table given above shows, there were 22 Acts and seven Regulations passed. The latter consisted of:—

I. Amending former Regulations regarding civil procedure, stamps and limitation, and village administration and establishment, in Upper Burma, since it had been found that the authority of the village-headman in petty civil disputes might advantageously be extended; and, secondly, that, under the control of the Judicial Commissioner, duly qualified advocates might be admitted to practice in the newly constituted courts.

II. Extending the territorial scope of the Aden regulations affecting the municipal administration of that Settlement to the more recently acquired territory of Perim and the suburbs of Aden on the mainland.

III. Regulating

III. Regulating the rights of landlords in Sylhet in regard to shifting cultivation in unsettled tracts, as the landlords who collected rent from the tenants of such migratory nature were found to set up claims to proprietary rights in land for which there were no grounds, except that the plots had been cultivated by some of the men who paid rent to them for other land not in dispute.

IV. Securing the rights of tenants in the Agror Valley, whilst allowing a fair revenue to the Khan of that territory.

V. Protecting by higher penalties on illicit mining the rights in the Ruby mines of Upper Burma.

VI. The village headman had been found so useful an institution in Upper Burma that it was thought worth while introducing a similar officer into town wards, with the necessary modifications.

VII. The Indian Forest Act had been found unsuitable to Assam, so a special Regulation on the subject was passed.

The 22 Acts of the year in question were as follows:—

I. Amending the Cattle Trespass Act, so as to meet the case of persons knowingly letting their cattle stray into the lands of others, apart from mere negligence.

II. Amending the Christian Marriage Act in several ways, such as removing ambiguity of terms, requiring a record to be kept of marriages solemnised under the Act, whether or not a certificate was demanded, and so on.

III. Amending the Evidence Act, chiefly by rendering irrelevant the evidence of a previous conviction merely intended to prove the likelihood of the person against whom it is offered having committed the offence with which he is charged, on the ground of general bad character.

IV. Extending the provisions of the Criminal Procedure Code regarding compensation payable for frivolous or vexatious charges by the party bringing them.

V. Amending the Indian Ports Act, by validating beyond question the power to make rules respecting the movements of vessels in port beyond those absolutely necessary for the public safety.

VI. Amending several Acts relating to Merchant Shipping, in regard to renewal of agreements, wreckage, indemnification of the State for expenses incurred in relieving native members of a crew left abroad by masters of foreign vessels, extending the term "coasts" to those of creeks and tidal rivers, &c.

VII. Amending the Act relating to tonnage measurement of vessels to accord with the English practice.

VIII. Extending the Easements Act to Bombay and the North-West Provinces.

IX. Amending the Merchandise Marks Act, &c., in accordance with suggestions made by a committee of merchants and officials of Calcutta.

X. Amending the Penal Code by raising the age at which a woman, married or unmarried, can consent to sexual intercourse, from 10 years to 12. This enactment gave rise to considerable agitation amongst the middle and upper classes of a portion of Bengal, where the practice of marrying at a tender age, and consummating as soon as the girl reaches puberty is very prevalent. In the rest of India, though such practice is not uncommon in certain classes, the proposal created no excitement.

XI. Amending the Indian Factories Act, more especially as regards the employment of women and children.

 XII. Repealing

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XII. Repealing and Amending Act, to facilitate the publication of revised editions of the General Acts and Local Codes.

XIII. Amending the Inland Steam Vessels Act, by authorising an additional class of masters and engineers, and enabling local Governments to assure themselves that holders of recognised certificates for sea-going ships are also qualified to act in inland waters.

XIV. Enabling the two Judicial Commissioners of Oudh to sit together for the hearing of certain cases, with a reference to the Allahabad High Court in case of difference of opinion. There are also some few repealing and simplifying provisions.

XV. Confirming and giving effect to the terms of an indenture regarding the affairs of the Nawab Bahadur of Murshidabad, the son of the last Nawab Nazim of Bengal.

XVI. Adding the powers of Colonial Courts of Admiralty to certain Indian Courts of unlimited Civil Jurisdiction, so that the jurisdiction in the former case should not be limited territorially.

XVII. Extending to British India the deck and load line provisions applicable to vessels entering from ports in the United Kingdom, or employed in the coasting trade of the latter.

XVIII. Applying to India the provision of the Bankers Book Evidence Act of England, whereby copies of entries in such books are made receivable, under certain conditions, in evidence.

XIX. Establishing the position of circle and village officials in Lower Burma, in accordance with the practice in Upper Burma.

XX. Simplifying in some respects, and amending, the Panjab Municipal Act, and consolidating the new with the old provisions in a single Act.

XXI. Amending the Municipal Act of Lower Burma in respect to connection of house-drains with sewers, and also explaining more fully the scope of a municipal permit to build a house, which had often been construed as a grant of the site to which it referred.

XXII. Extending some of the provisions of the Inland Emigration Act to parts of the Central Provinces and to the northern coast tracts of the Madras Presidency.

In 1892 legislation reached, numerically speaking, its lowest point during the decade, as only 10 Acts and four Regulations were passed. The latter were as follows:—

I. To establish the procedure with regard to Village Forest Reserves in Ajmer-Merwara.

II. Amending what was apparently an erroneous reference entered in the original Regulation regarding civil justice in the Arakan Hill Tract.

III. Providing severer penalties for certain offences on the Sindh Frontier than could be inflicted under the existing law.

IV. To provide against mismanagement and abuse of trust in respect to temple property in Coorg, where some such regulation was much needed.

The 10 Acts are referred to below. Eleven Bills also were pending in the Council at the close of the period to which this review relates, dealing with, amongst other subjects, Bankruptcy, Copyright, Merchant Shipping, Electrical Lighting, the Law of Partition, and the execution in British India of Capital Sentences passed beyond its limits in certain cases:—

I. The first of the Acts that were passed was a necessary consequence of the non-renewal of the terms on which a Treaty was negotiated in 1880 between Great Britain and Portugal, since,

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in the absence of such Agreement the Portuguese Possessions in India had to be treated as foreign territory, and Customs duties levied on goods passing by land into or out of those dominions. The Indian Tariff Act was, therefore, modified to meet the new conditions.

II. This Act was intended to validate certain marriages between Christians and persons of other religions which had been solemnised under a part of the Act of 1872 which had been since held to be inapplicable to such unions.

III. An alteration in the Rangoon Port Commissioners Act of 1879 was found advisable, under which firms represented on that Commission could be enabled, under certain provisions and safeguards, to do work for or supply goods to, the Commission, as under the corresponding rules in regard to the Calcutta Port.

IV. Amending the Bengal Court of Wards Act, so as to allow the Court to assume charge of the estate of an adult male proprietor on the application of the latter and when the Local Government might decide that such management was in the public interests. Some minor changes, too, were made in the Act of 1879.

V. Under this enactment a body of Military Police was formed for service in South Lushai Land and similar frontier tracts.

VI. Amending certain sections of the Civil Procedure Code and Limitation Act in matters of detail brought to notice through decisions of the High Courts.

VII. Establishing an additional Civil Court for the hearing of civil suits not exceeding Rx. 250 in value, in the city of Madras, in consequence of the expense entailed in the disposal of such suits by the High Court.

VIII. Providing for the levy of tolls on the Lansdowne Bridge over the Indus at Sakkar, since the local Act applied only to such works when constructed from Provincial funds, and not to Imperial undertakings.

IX. Applying to towns of Lower Burma the Regulation of 1891 relating to the administration of towns in the Upper Division of that Province.

X. Validating and limiting the rate levied on estates under the Courts of Wards to provide for management and supervision by State officials.



The Madras Council passed during 1891 and 1892 three Acts, one a "General Clauses" enactment of the usual character, and two Amending Acts, the first of the Harbour Trust Act of 1886; the second, of the City Municipal Acts of 1884.

In Bombay five Acts were passed in the same period. The respective relations of the Commissioners, District Magistrates, and the Inspector General to the Police Force had to be revised, as the existing law was antecedent to the appointment of the last named official. The success of the compulsory vaccination provisions in Bombay and Karachi, and the absence of any objection to the process on the score of caste or religion, led the Local Council to provide for the extension of the system beyond the above cities, as necessity arises. The existing law as to the inspection of boilers and prime movers was found to require modification in several respects, so a new Act was framed to meet the case. The abuse in two districts of the liberty to store the flowers of the Mahua or Mhaura tree, from which spirits are distilled, had grown to a pitch which necessitated the imposition of restrictions by Government in order to prevent illicit distillation. The Village Sanitation Act established local Committees and power of inspection and remedy where there is no municipality.

The Bengal Council passed three Acts, one of which regulated the public conveyances of the capital city, the others amended the provisions relating to village watchmen, and the recovery of public demands.

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The newly established Council of the North-West Provinces passed a Waterworks Act in 1891, and Acts regarding Village Sanitation and Lodging-houses respectively. A Village Courts' Act passed this Council, but had not become law within the period under review.

Special subjects of Legislation during the decade.

In connection with the subjects dealt with by the Legislature in previous years, that is, between 1883 and 1890, special mention has to be made of the numerous and important Acts passed regarding the system of administration of the Land Revenue, including the relations between landlord and tenant, and the loans made by the State for Agricultural Improvements. As regards the last matter, the Act of 1883 merely consolidated and amended the previous law on the subject, as it was found that the question on which legislation was at first proposed, namely, the facilitation of the application of private capital to the improvement of land, was so wide, and attended with so many difficulties in points of detail, that a separate Act would be required, if the matter proved susceptible of adequate treatment at all. The Loans Act of 1884 extended the system from individuals to village communities or associated agriculturists, with provision for their own arrangements regarding individual liability for repayment.

Land Improvement and Agricultural Loans Acts.

Bengal Tenancy Act of 1885.

But the more important Acts of this class are those which affect the relations between landlord and tenant in Bengal and Upper and Central India. In the first rank stands Act VIII. of 1885, the Bengal Tenancy Act, by which the whole of the rent law of that great Province was reviewed, systematised, and, where necessary, modified or recast. The main principle of the enactment may be described in brief as the establishment of fixity of tenure at judicial rents, and its most important objects have been stated to be "to give the settled peasant the same security in his holding as he enjoyed under the old customary law; to ensure to the landlord a fair share of the increased value of the produce of the soil, and to lay down rules by which all disputed questions between landlord and tenant can be reduced to simple issues and decided upon equitable principles." The peculiar circumstances of the Santhal Pargannahs in this Province were also made the subject of fresh legislation by Regulation in 1886, when the leases granted under that of 1872 were expiring. Another important Act dealing with this subject was XXII. of 1886, whereby tenants at will in Oudh were protected against arbitrary eviction and undue enhancement of their rent, with provision for compensation for improvements carried out by them. The landlords discussed the question with the Lieutenant-Governor and readily co-operated in improving the relations between themselves and their tenantry, which, under the Act of 1868 had been characterised of late years by much friction.

Oudh Rent Act of 1886.

Panjab Tenancy Act of 1887.

In the Panjab, again, legislation on the same lines as in Bengal and Oudh was undertaken in 1887, Act XVI. of which year also remedied certain defects in definition of tenants with right of occupancy of whom several classes were demarcated. It amended, also, the provisions of the Courts Act of 1884 as regards Revenue Courts. It was enacted, moreover, that under certain subsidiary rules, the rent of tenants having what are known as occupancy rights, should be enhanced or adjusted in reference to the State assessment and at fixed intervals. Tenants' improvements were protected by provision for compensation on ejectment, and produce attached by decree or order of a Civil Court was made liable to the landlord's demand for rent.

Panjab Land Revenue Act of 1887.

In another Act of the same year, No. XVII, the whole law of the Province relating to the administration of the land revenue was codified and arranged. New provisions regarding village cesses, partition of shares in an estate or occupancy holding, and State rights in mineral oil, and so on, were included, and sundry practices were maintained or validated which had previously been prevalent on a basis of old custom only, such as a fluctuating assessment and the substitution of public service for payment of revenue in cash.

Central Province Acts of 1883 and 1889.

In 1889 the Land Revenue Act of 1881 and the Tenancy Act of 1883 of the Central Provinces were brought up to date by introducing all modifications which experience, gained in the course of the new and more detailed settlement, had shown to be necessary. It was also provided that where the prevailing

prevailing proprietary (Málguzári) tenure had not been introduced, the raiatwari system of individual holdings should be adopted. LAW AND LEGISLATION.

In the case of the North-West Provinces, the provisions of the Acts XIV. and XV. of 1886 were mostly directed towards the facilitation of procedure or more expeditious disposal of rent and other revenue suits, and to regulate the system of revision or appeal from the decisions passed in such disputes by the local offcers. North-West Province Acts of 1886.

The Bombay Revenue Code of 1879 was amended in 1886 by an Act of the Local Council, assuring to holders of unalienated land the full advantage of all improvements in their holdings effected by them or at their cost. Bombay.

Two Acts were passed in connection with this subject by the Madras Legislature. In 1884 the procedure with regard to arrears of Revenue was regulated, and Act I. of 1887 secured the compensation of tenants for improvements effected by them in the District of Malabar, where the tenure and the relations between the proprietor and the holder are different in some respects from those prevailing in other parts of the Presidency. Madras.

On the subject of the relief of encumbered estates the legislation of the decade was chiefly by way of amending existing Acts, rather than of introducing fresh provisions. Thus the Acts relating to the Chutia Nagpur Estates, the Sindh Zamindars and the Gujarath Talukdars all passed under review. The same remark may be held to apply to the Deccan Agricultural Relief Act of 1879, which was amended in points of detail on more than one occasion, and finally, its working was examined by a Special Commission in order that the Government of India might be in a position to judge whether legislation on the same lines was advisable in certain tracts in other Provinces where agricultural indebtedness was assuming a form that might lead to future administrative complications. The Commission submitted a Report in 1892, the contents of which are still under consideration. Encumbered Estates and Agricultural Indebtedness.

Next to the Land Revenue administration, the constitution and functions of Municipalities and Local Boards have been the most prominent subjects that the Legislature has had to consider during the last eight or ten years. These, however, are so varied and numerous that it has been found advisable to treat of them in a separate chapter of this review. All that need be mentioned here is that since 1883 between 18 and 20 Acts and Regulations have been passed on the subject, most of which were directed towards the extension of the powers and responsibilites of existing bodies and the introduction, to an extent varying according to local conditions, of elective privileges. The scope of the legislation in question includes both the municipal system of the Presidency and other cities and that prescribed in the case of smaller corporations and of rural bodies. There may also be added that undertaken in connection with Port Trusts and Harbour Commissions in the case of Calcutta, Chittagong, Madras, Bombay, Rangoon, and Karachi, and some extension of the financial powers of local bodies, as in the Act XV. of 1885, enabling such a corporation under certain rules to guarantee interest on capital applied to any purpose to which the funds of the corporation itself may be legally applicable. Sanitation again has been dealt with legislatively, as regards places not under corporative bodies, and Village Sanitation Acts have been passed for the North-West and Central Provinces and for Bombay. Mention of these will be found in a subsequent part of this review. Municipal and Local Government. Sanitation.

Where, as in India, the procedure in Civil and Criminal matters is codified, experience in the courts themselves, and the interpretation placed upon the law by the High Courts, in the exercise of their powers of revision and appeal, necessitate or suggest frequent emendations and improvements. In many of the cases of this sort that occurred in the last 10 years, the tendency was to facilitate or simplify the existing procedure. For instance, the power of varying sentences under the Penal Code, and the powers of the Lower Civil Courts in Madras were extended. The pressure of judicial work on the executive staff of the Central Provinces was Miscellaneous subjects.

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was relieved by allowing the delegation of certain portions of such work to a supplementary subordinate staff, whilst later on, in 1890, the jurisdiction of the Lower Courts was extended. Some legislation of the same description, too, was applied in 1887 to the circumstances of Assam and the North-West Provinces, where the powers of the Lower Courts were extended. The amendment of the Penal and Criminal Procedure Codes in 1891 has been mentioned above. In 1883 an amendment was proposed extending to Native magistrates jurisdiction over European British subjects, which excited some temporary ferment in Bengal and a few other tracts where there are considerable numbers of non-official European residents. In the next year, after some discussion and consultation with the classes interested in the matter, the original proposal was modified to a considerable extent, and where distinctions based on race were removed, as regards the trying authority in certain cases, they were recognised in the extension of the system of trial by jury to which the amendment gave rise. Amongst other enactments, showing the wide scope of the subjects that had to be dealt with by the legislature during the period in question, we may mention the comprehensive regulation of explosives, the establishment of a University at Allahabad, the protection of wild birds, of patents and designs, the arrest of debtors, emigration to foreign colonies and to Assam, cruelty to animals, and gambling in several forms, came within the cognisance of the Councils. In Bombay, a convenient spot having been found just outside the distance to which the existing Regulations extended, a rudimentary but popular Monte Carlo was there established, till the law was duly amended. Then, in the same Presidency, a considerable class of merchants and shopkeepers established an elaborate and completely organised system of betting on the amount of rain water periodically delivered through a certain spout, with stalls leased to the bookmakers and others interested in the speculation, so long as the law on wagering was not wide enough to include their operations and this spout and rain gauge was not held to be an instrument of gambling within the existing Act. The attractions of this form of tempting fortune were sufficient to draw votaries even from distant towns to the capital, where, for some reason or another, no rival establishment could get a clientéle. In 1890 the requisite amendment was made in the law, and the scandal disappeared from public view. The gambling propensities of the Burmese are strongly developed, but legislative interference has been thought necessary merely in the case of the game of the 36 animals, which, from the following description, seems to be as simple as the operations on the spout at the other side of the country. The banker (a professional) chooses one of 36 animals, writes its name on a bit of paper, and puts that paper into a box or bamboo tube, whereupon his emissaries go round asking the punters to name the animal thus selected, and back their opinion with their money. When all the stakes are tabled, the paper is taken out and read. Those who have guessed right get 30 times their stake; the rest lose. This means of subsistence was prohibited in 1884. The Registration of Publications under the Act of 1867, to pass to another topic, gave rise to noteworthy results to which it was considered advisable in 1890 to put a stop. As the law existed before that date, the printer was bound to deliver to the Government three copies of the work in question, at the public expense. When the Act of 1867 was introduced, apprehension was expressed lest this provision should lead to abuse, and the fear was thoroughly realised, as in a considerable number of instances the book was printed merely for the purpose of realising from the public treasury the extravagant price placed upon it by its author, compiler, or publisher, after which few, if any, copies were printed off. It is now provided that copies officially required, whether for India or for the libraries in the United Kingdom, entitled to them under the English law, should be deposited without payment. There may also be mentioned a few more special Acts, such as that relating to cantonments (XIII. of 1889), consolidating the existing law and repealing all portions of it that had become obsolete, and giving power to the Governor General in Council to make rules consistent with the Act, for the conduct of various executive duties in connection with the management of cantonments, fiscal and sanitary, and for the convenience and comfort of those who reside within the limits of such areas. Then,

again,

again, the Official Secrets Act of 1889 (52 & 53 Vict. c. 52), was re-enacted for India in that year, with such adaptations of its language and penalties as the Indian Statute Book requires. The law relating to Railways, too, was consolidated in 1890 and brought up to date, and, in some respects, amended in accordance with English legislation and the suggestions contained in the annual Reports of the Railway Commissioners.

From the above enumeration of the chief measures carried through the Council, it may be seen that in the present day most of the legislation relates to the amendment and consolidation of previous enactments, and to the incorporation into the existing law of practices that have been found beneficial, and have, accordingly, been established or recognised by executive orders, or of provisions based on those of the English law, which the circumstances and progress of India render it desirable to acclimatise.

## CHAPTER V.

## MUNICIPAL AND LOCAL ADMINISTRATION.

MUNICIPAL AND LOCAL ADMINISTRATION.

IT is now some forty years and over since the Government of India inaugurated a general system of municipal administration. Previous to 1850 municipal government had been confined to the three Presidency towns, but in that year it was recognised that in all the larger towns of India the requirements of the inhabitants in the way of sanitation and public comfort and convenience were so far in advance of those of the country at large that it was only just to meet them out of local resources raised from the population that profited by the additional expenditure on the above objects, and that this population, too, should have a consultative voice in the administration of such funds. A further step in the same direction was taken about twenty years later, when the cesses, levied mostly on land, assigned for public works, schools, dispensaries, and similar objects of local utility, were made over, under the general control of the Government, to District and subdivisional Boards, or local bodies of corresponding constitution and functions. The central administration has also been relieved of considerable responsibilities in matters of detail by the constitution of special Boards, such as those for the administration of the Ports of Calcutta, Bombay, Karachi, and Rangoon, and the Harbour of Madras, by the appointment of Cantonment boards and other minor corporations of the like character. The extension of the system of local administration, so far as the two main classes of corporations are concerned, has been regarded by the Government not only as a measure of relief, whereby the higher executive officials might be enabled to divert their attention from the ever increasing amount of detail to the wider interests entrusted to their charge, but as a means, also, of political education. The overwhelming majority of the masses is, as will be seen later on in the course of this review, entirely illiterate, so that the duties and obligations of citizenship can be best brought home to it by such concrete examples as may be gleaned from sitting with one's neighbours in deliberation over the administration of funds in which the assembly has a direct and easily recognisable interest. Under former Governments such responsibilities were scarcely within the popular reach, and even in the present generation there are indications of the tendency to shrink from assuming them, and to delegate them to a class literary in proclivity, and thus more adaptable to the change of circumstances. Nevertheless, the strides made in the last ten years in the desired direction have been great ; the powers and responsibilities of the corporations in question have been much increased, and, in all the more settled parts of the country, the State control has been gradually restricted to just the extent necessary for the due guidance of bodies constituted on principles so novel to the masses concerned. The elective system has been thoroughly established, though, owing to the astonishing number and variety of the communities that go to form the population of India, the field thus represented has to be extended by means of the reservation of a certain proportionate power of State nomination. The results, speaking generally, have been fairly successful, or, to put it otherwise, the expectations formed regarding them have not been disappointed, for it was not anticipated that, at the outset, the substitution of local confidence for trained experience would tend to maintain quite the same level of efficiency as had previously characterised the administration of these bodies, but the view has been justified that the sacrifice is relatively a small one, and that every few years some progress is manifested. On the whole, the success of the experiment has been more marked in respect to the working of the Local Boards, where interests are less concentrated and

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the members live farther apart from each other, than in the district municipalities, where faction or personal considerations carry more weight. MUNICIPAL AND LOCAL ADMINISTRATION.

The amount of the funds placed at the disposal of the various municipalities, trusts, and local bodies in India is, to a certain extent, an indication of the importance of those corporations. The marginal statement gives the figures for the two last years of the decade and for the first for which they are completely available in the same form. In addition to these special funds, a portion of the grants for educational and medical services is also administered by local boards. Loans obtained for special works are not taken into consideration here, but will be mentioned below. The increase under the main heads of Municipalities and Port Trusts has been very noteworthy during the ten years. The subject will now be treated under the two general heads of Municipal Corporations and Local Boards, with a few lines on the administration of the chief Port Trusts.

| Fund, &c. | 1882–83. | 1890–91. | 1891–92. |
|---|---|---|---|
| | *Rx.* | *Rx.* | *Rx.* |
| Municipalities - - | 2,391,500 | 3,036,000 | 3,395,600 |
| Local Boards : | | | |
| Provincial Rates - | 2,000,000* | 2,388,000 | 2,421,800 |
| Cantonment Funds - | 121,100 | 166,000 | 178,800 |
| Town and Bazar - | 122,300 | 75,000 | 86,000 |
| Others - - - | 189,500 | 140,000 | 158,000 |
| Public Works Receipts (Tolls, &c.) - - | 127,200 | 256,000 | 255,200 |
| Port Trusts and Funds - | 978,400 | 1,297,000 | 1,382,400 |
| TOTAL - - - | 3,930,000 | 4,970,000 | 5,450,000 |

* Approximately.

## MUNICIPALITIES.

MUNICIPALITIES. In dealing with the affairs of municipalities, attention must first be recalled to the fact stated above, that these bodies are of quite recent creation in India. This is the more necessary, because the glamour which has been cast by Sir Henry Maine round the title of village communities may otherwise give rise to the notion that the present system is no more than the development of a native institution. In some parts of India, especially the north, the structure of the village society justifies the term community, in its narrower sense ; whilst in much of the rest of the country the village is merely a heterogeneous collection of settlers on the land, with no bond in common but that of residence and conformity with a few general regulations. In Bengal, and on the south-western coast, the village does not even imply collective residence, and has become merely a convenient revenue term. But though the description of village organisation given by Sir Henry Maine is only fully applicable, perhaps, to some of the communities of the north of India, the regulations just mentioned certainly serve to keep the body of villagers together in varying degrees. But the difference between these communities and the modern municipality is that, in the former case, everything is referred to custom, in the latter to advantage. The keynote in the one is conservatism, or the maintenance of the standard of life at the level of that of former times, in the other, improvement. The law defines the taxation it is within their power to impose, and the objects to which the expenditure of their revenue must be confined. New taxes, or any alteration in the rate of those already in force,—any large project, any loan or material departure from the sanctioned budget for the year, must be approved by the Government. On every municipal Commission there are a few State officials, sometimes elected, elsewhere, nominated. On the whole, and including the Presidency corporations, the elected members, whether official or otherwise, predominate in numbers. The constitution of these bodies differs very much from province to province, according to local circumstances, and even within a single province the larger municipalities of towns are often constituted somewhat differently from those established in the small market centres of the rural tracts. The following Table gives the distribution of the Commissions in the year 1891–92, and shows the small proportion borne to the total by the European and the official elements. The elective privilege has been conferred on all the provinces except the newly-acquired possession of Upper Burma, and in all but two of the smaller provinces, and in the Panjab, Burma, and Bombay, which includes Sindh, the elected members outnumber, on the whole, the rest. There are, necessarily, cases of small towns in which all the members are, for the present, nominated, whilst the Commission is, as it were, on probation. There are others where the municipality has, from some cause

MUNICIPALITIES.

or other, proved incapable of its duties, or too small and poor to support its charges, so the Return varies from year to year :—

| Province. | Number of Municipalities. | Total Number of Members. | By Qualification. | | By Employment. | | By Race. | |
|---|---|---|---|---|---|---|---|---|
| | | | Nominated. | Elected. | Officials. | Non-Officials. | European, &c. | Natives. |
| Madras (Districts) | 55 | 871 | 398 | 473 | 207 | 664 | 158 | 713 |
| Bombay „ | 174 | 2,421 | 1,513 | 908 | 696 | 1,725 | 205 | 2,216 |
| Bengal „ | 145 | 2,131 | 977 | 1,154 | 372 | 1,759 | 193 | 1,938 |
| North-West Provinces and Oudh | 103 | 1,555 | 319 | 1,236 | 287 | 1,268 | 156 | 1,399 |
| Panjab | 149 | 1,656 | 851 | 805 | 314 | 1,342 | 125 | 1,531 |
| Central Provinces | 57 | 634 | 193 | 441 | 157 | 477 | 51 | 583 |
| Assam | 12 | 126 | 75 | 51 | 50 | 76 | 25 | 101 |
| Upper Burma | 16 | 193 | 193 | – | 101 | 92 | 69 | 124 |
| Lower Burma | 25 | 321 | 210 | 111 | 84 | 237 | 74 | 247 |
| Berar | 8 | 128 | 38 | 90 | 36 | 92 | 17 | 111 |
| Coorg | 5 | 53 | 45 | 8 | 17 | 36 | 6 | 47 |
| Bombay City | 1 | 72 | 16 | 56 | 12 | 60 | 17 | 55 |
| Madras City | 1 | 35 | 11 | 24 | 9 | 26 | 11 | 24 |
| Calcutta City | 1 | 77 | 27 | 50 | 15 | 62 | 25 | 52 |
| TOTAL, 1891–92 | 752* | 10,273 | 4,866 | 5,407 | 2,357 | 7,916 | 1,132 | 9,141 |

* Excluding 3 in Ajmer, for which Returns are not available.

It is interesting to set, side by side with the above figures, those from the corresponding Return for 1881–82, where it is available. The following Table, accordingly, indicates the main points of difference between the two years. The Presidency Corporations are included in both, but Upper Burma is omitted from the latter.

| Province. | Total Members. | | Nominated. | | Elected. | | Official. | | Non-Official. | | European, &c. | | Natives. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1881–82. | 1891–92. | 1881–82. | 1891–92. | 1881–82. | 1891–92. | 1881–82. | 1891–92. | 1881–82. | 1891–92. | 1881–82. | 1891–92. | 1881–82. | 1891–92. |
| Madras | 804 | 906 | 650 | 409 | 69 | 497 | 355 | 216 | 449 | 690 | 289 | 169 | 515 | 737 |
| Bombay | 2,590 | 2,493 | 1,839 | 1,529 | 48 | 964 | 919 | 708 | 1,671 | 1,785 | 407 | 222 | 2,183 | 2,271 |
| Bengal | 2,372 | 2,208 | 1,814 | 1,004 | 85 | 1,204 | 621 | 387 | 1,751 | 1,821 | 543 | 218 | 1,829 | 1,990 |
| North-West Provinces and Oudh | 1,460 | 1,555 | 328 | 319 | 694 | 1,236 | 477 | 287 | 983 | 1,268 | 347 | 156 | 1,113 | 1,399 |
| Panjab | 2,171 | 1,656 | 1,497 | 851 | 28 | 805 | 692 | 314 | 1,479 | 1,342 | 400 | 125 | 1,771 | 1,531 |
| Central Provinces | 640 | 634 | 8 | 193 | 397 | 441 | 239 | 157 | 401 | 477 | 139 | 51 | 501 | 583 |
| Assam | 100 | 126 | 70 | 75 | – | 51 | 47 | 50 | 53 | 76 | 37 | 25 | 63 | 101 |
| Lower Burma | 97 | 321 | 65 | 210 | – | 111 | 43 | 84 | 54 | 237 | 52 | 74 | 45 | 247 |
| Berar | 97 | 128 | 60 | 38 | – | 90 | 50 | 36 | 47 | 92 | 37 | 17 | 60 | 111 |
| Coorg | 49 | 53 | 32 | 45 | – | 8 | 17 | 17 | 32 | 36 | 7 | 6 | 42 | 47 |
| TOTAL | 10,380 | 10,080 | 6,363 | 4,673 | 1,321 | 5,407 | 3,460 | 2,256 | 6,920 | 7,824 | 2,258 | 1,063 | 8,122 | 9,017 |

The two chief features are the growth of the elective system and the reduction in the official and European elements. In most of the Provinces the changes have been effected since 1883–84, when the current system was modified by legislation in this direction. It is worth while, therefore, to briefly touch upon the action of the Legislature in connection with this subject, before entering upon the working of the municipalities in detail. The general object of all the enactments in question was to extend the proportion of elected members of municipal commissions and to reduce that of officials and nominees, but the opportunity was taken also to revise the existing Acts in matters of details where their working had proved defective, and to enlarge at the same time their powers and responsibilities. In some of the Provinces the current Acts required merely the interpolation of provisions regarding the first-named matter, because, except as regards the elected element, their constitution was already to a considerable extent representative and locally responsible.

The following remarks apply, it should be understood, to district municipalities only. The Presidency corporations are separately dealt with later on in this chapter.

Madras.

Taking the provinces in turn, in *Madras* the Act of 1871 was repealed by Act IV. of 1884, and the whole of municipal administration brought up to the requirements of the day. One-fourth of the members of each corporation to which the Act is applied may be nominated, inclusive of the revenue

revenue officer of the division, who sits *ex officio*. The rest may be elected. The term of office is three years. In some cases, numbering 36 out of 55 at present, the municipal body elect its own chairman; in others the selection is made by the Government. The qualification of elector and candidates, and the conditions and rules of election, are also prescribed by the Government. The same authority prescribes the schemes of taxation to be imposed by each corporation, and has the power of sanctioning alterations in it. Minute provisions as to sanitation, conservancy, vaccination, and other functions of a municipality in India are incorporated in the Act, the working of which has been found satisfactory; and out of 55 corporations 32 enjoy privileges of election, and 23 are not yet advanced to that stage. MUNICIPALITIES.

In *Bombay*, the Act of 1873 was found to require few amendments except as to the composition and method of appointment of the members and the delegation to the Commission as a whole the powers which had been previously reserved to the presiding officer. In 1884, accordingly, an Act was passed to the above effect, though the full electoral privileges were confined to the larger towns, and the President is, as a rule, nominated by the Local Government. One-fourth only of the members can be salaried officials, and one half of the commission may be elected by the ratepayers. Bombay.

The municipalities in *Bengal* were classified under the Act of 1876 into three groups, of which those known as Unions were nothing more than a collection of detached villages, without any urban characteristic save the need of sanitation, which it was afterwards found could be better dealt with by the newly constituted district Boards. In the legislation of 1884, accordingly, both Unions and Stations disappeared from the municipal roll, and only the towns best fitted for municipal administration were retained. In Act III. of the year in question certain towns were scheduled apart from the rest as being still in a condition that required more than the average official attention, whilst the rest have the privilege of electing two-thirds of their members. The qualification in the way of payment of municipal rates is fixed fairly low, and in some towns the voters numbered in 1891–92 over 30 per cent. of the municipal population, against a provincial average of 17·4. Most of the larger municipalities have also the right of electing the Chairman of the corporation. Special provisions were introduced into the Act regarding the control of the District officer over the proceedings of the municipality, since it was obvious that as greater liberty was allowed to the new corporations due precautions should be taken that a rightful use should be made of it. Some few alterations in the former law were made in connection with the assessment and valuation of properties, but, on the whole, the changes were but few and relatively unimportant. Bengal.

The Act re-modelling the municipalities* in the *North-West Provinces* and *Oudh* was one of the first to be passed in pursuance of the policy of extending the elective system. It became law in 1883, and was applied to most of the municipal bodies in the province from the beginning of the following year, in supersession of that of 1873. Out of 108 corporations, in 97 the proportion of nominated members is not to exceed one-fourth, and in practice it was found that 15 per cent. was a convenient number. The qualifications of the electors vary according to the grade of the town on the Commission of which the candidate is to serve, and the qualification of the latter is, as a rule, three times the amount of income, taxation, or house-rating that is required in the case of the voter. In all but six of the largest towns, the privilege of electing their own chairman was conceded to the commissioners, but at the first elections that followed the introduction of the Act, it was found that in 71 towns the district officer was chosen, and in 20 more some other person, usually, however, an official. It was found, too, that there was a widespread and natural tendency to return the same persons who had been sitting under the former law, in many cases without contest, owing to the timidity of the community in exercising their new privileges, and the candidates' ignorance of the art of canvassing. North-West Provinces.

* The 338 small places in which Act XX. of 1856 is in force are not included in this review. In 1891–92 they raised an income of Rx. 31,826 for local protective and sanitary purposes; this amounts to about 0·19 rupees per head.

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canvassing. The members retire, according to the rules framed under the Act, by rotation, and are elected in multiples of three, in order to coincide with the term of office, which consists of that number of years. The proportion of those who actually vote to those on the register still keeps low, and in the 65 towns in which elections took place in 1891–92, only some 27 per cent. exercised their privilege, as compared with about 34 six years back. The reason appears to be mainly the number of uncontested seats.

Panjab.

The legislation on the subject of municipalities in the Panjab has been to some extent on the same lines as that in the neighbouring provinces. The purely nominated bodies of the Act of 1873 have been converted in the majority of cases into partially elective bodies, under Act XIII. of 1884, whilst a number of small towns have been removed from the list, on the ground that their sanitation and other requirements can be as well looked after by a District board as by a municipality, whilst the latter is compelled, when on so small a scale, to obtain its funds by means of an octroi schedule, which imposes something not far removed from transit-duties. It was found in 1891 that the provisions of the Act of 1884 were in some respects too complicated to suit the smaller towns, and that in others the hands of the municipal authorities wanted strengthening in matters of sanitary regulation and other branches of their duties relating to health and convenience of the public. Act XX. of 1891, was passed accordingly, to meet the case and provisions were added in it whereby the District officer is empowered to act in several cases in which under the former Act a reference to the Local Government was necessary, entailing considerable delay and inconvenience. The maximum proportion of official members is fixed at a third, instead of a fourth, as in some other provinces, and the term of office is three years. Unless otherwise ruled, the President is elected by the Commissioners, but the latter are empowered to refer the selection to the Local Government or the Divisional Commissioner, as the case may be. A curious feature in the municipal arrangements of the Panjab is that in the capital city of the Province it has been found necessary to adopt a religious basis for the constituencies, and to allow a member to be elected by the Hindu, Musalman, Sikh, and Christian communities respectively. In other towns, also, it is found that the elections are fought occasionally on strictly religious lines.

Central Provinces.

The municipalities in the Central Provinces were under an Act of 1873, until 1889, when Act XVIII. of that year re-modelled them on much the same system as has been already described above. The proportion of official members is higher, however, than in more settled parts of the country, and may rise to three-fifths of the total number. The former Act, again, was in some respects indefinite regarding the powers of taxation under it, as well as falling short in others of the standard required under the development of the Province. The municipalities in *Assam* are regulated by the two Acts mentioned above in connection with Bengal, but only three towns come under the late Act, and under that of 1876 there are three municipalities of the second class, three stations and three unions. The towns are all small, and the commissions correspond in their numerical strength.

Burma.

The Burma municipalities are under two different systems. In the lower division of the Province, the Act of 1874 has been supplemented by Act XVII. of 1884, introducing the elective system so far as three-fourths of the members are concerned, in the larger towns. In Upper Burma the municipalities have not yet reached the elective stage, and the experience gained in the Central Provinces has been utilised in constituting the administrative bodies in that new acquisition, under Regulation V. of 1887. In any town to which this regulation is applied, a Committee is appointed which is invested by the local administration with power to impose certain taxes, previously sanctioned, and to spend the proceeds on the usual municipal objects, to which police is added, as a special case. The provisions of the Lower Burma Act are so much in accordance with those of the other enactments that have been mentioned above in connection with other provinces, that further detail is superfluous in this place. The same remark applies to the regulation in force in Ajmer-Merwara, and to the Foreign Department's order regarding Berar municipalities, both of which were passed in 1886, in pursuance of the general policy.

Reviewing

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Reviewing the whole question, as it has been disclosed in the provincial summaries that are annually issued, there is no doubt that the results of the extension of the elective system and of the increased localisation of administrative powers are not to be judged by those of the first eight or ten years of its operation, during which period the *regni novitas* has necessarily led to much of an experimental character. In India social influence is too often dissevered from intellectual culture and wealth, and the two last from each other, to admit at present of the distance being bridged by electoral privileges, so the dignity of nomination by the State exceeds in the eyes of the upper classes the honour of being wafted to a seat on the municipal board by the "most sweet breath" of the multitude, whose voice the local magnate would consider himself degraded by soliciting. Ten years hence, probably, political education will have permeated to some extent both the higher and the lower strata, instead of being restricted to the middle of the community, and then the warrior caste may dethrone the writer from his seat as the chosen of the weaver and the potter.

In the marginal table a few of the leading current statistics regarding Indian municipalities, including those of the three Presidency towns, are given. The corresponding figures for 1881–82 are added for comparison. The provincial detail is shown in the statement on the next page.* As regards the falling off in the number of the corporations, it has been explained above that in the last 10 years many small municipalities and unions have been abolished, and the towns or villages in which they had been established for sanitary supervision and improvement were placed for that purpose under the District or other local boards. The increased yield of taxation is due not so much to the growth of imposts properly so-called as to the extension of rates for services rendered, such as those on account of water and lighting. Amongst current receipts, again, as distinguished from revenue, the grants from public funds or local resources are more prominent now than under the former and more restricted form of municipal administration. On the expenditure side of the account it is worth noting that in 1891–92 44 per cent. of the current disbursements was spent on conservancy and other objects directly connected with the public health. Some 21 per cent. went in roads and the public convenience generally. The public safety absorbed nearly 8 per cent., and administration and collection nearly 10. Only 6 per cent. was spent on education, the lower branches of which are entrusted, in part, to the municipalities under the new system, and the remaining 12 per cent. is debited to various miscellaneous heads. As regards the sources of income, the largest, octroi, or town duties, may be left for comment below, as it is not found in every Province. Nearly 20 per cent. of the current revenue, omitting grants from outside sources, is derived from the taxation of immoveable property, houses or lands, within municipal limits. Special rates, such as those for water, lighting and conservancy, bring in over 15½ per cent. Taxes other than that on land, &c., are credited with about 6·2 per cent., and tolls with 2¾. Altogether, some 76⅓ per cent. of municipal revenue is derived from rates, tolls, and taxes, leaving 23⅔ to be levied in the form of rents and fees, fines and numerous minor sources. Looking to the objects on which the income is spent, the incidence, which is less than 1½ rupees per head of municipal population, including that of the Presidency towns, is no unfair burden.

| | 1881–82. | 1891–92. |
|---|---|---|
| Total number of municipalities | 794 | 755 |
| Population in municipal limits | 14,295,502 | 15,742,581 |
| | Rx. | Rx. |
| Revenue from octroi | 703,627 | 845,996 |
| " " assessed taxes | 252,366 | 255,415 |
| " " other taxes, &c. | 716,383 | 1,248,636 |
| TOTAL FROM TAXATION | 1,672,376 | 2,350,047 |
| Other receipts | 593,969 | 1,045,547 |
| CURRENT REVENUE | 2,266,345 | 3,395,594 |
| Loans and deposits | 639,897 | 6,480,780 |
| TOTAL RECEIPTS | 2,906,242 | 9,876,374 |
| Current expenditure | 2,459,367 | 3,902,409 |
| Loans and deposits | 651,996 | 5,822,236 |
| TOTAL EXPENDITURE | 3,111,363 | 9,724,645 |
| | Rupees. | Rupees. |
| Incidence per head of taxation | 1·13 | 1·49 |

* The figures of receipts and disbursements are taken from the Finance and Revenue Accounts of the Government of India, in which the distribution differs somewhat from that in the municipal forms.

## RECEIPTS and DISBURSEMENTS of MUNICIPALITIES in 1891–92.

| HEAD. | Presidency Municipalities. | | | District Municipalities. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bombay. | Calcutta. | Madras. | Bengal. | Madras. | Bombay. | North-West Provinces and Oudh. | Panjab. | Central Provinces. | Assam. | Upper Burma. | Lower Burma. | Smaller Provinces. | TOTAL India. |
| Octroi | 113,501 | – | – | – | – | 153,021 | 208,077 | 270,348 | 89,216 | – | – | – | 20,833 | 845,996 |
| Tolls | 1,308 | – | 4,910 | 12,119 | 35,046 | 21,280 | 2,795 | – | 705 | 2,384 | 182 | 3,629 | – | 84,358 |
| Taxes on houses and lands | 191,935 | 160,715 | 36,954 | 80,779 | 60,646 | 46,354 | 7,480 | 12,215 | 2,960 | 4,551 | 19,190 | 46,218 | 1,109 | 671,106 |
| „ „ vehicles and animals | 32,989 | 21,384 | 7,218 | 18,356 | 15,197 | 8,925 | 3,094 | 2,627 | 68 | 493 | 183 | 998 | 60 | 111,592 |
| „ „ trades and professions | 4,873 | 32,963 | 6,548 | 2,308 | 18,872 | 1,081 | 11,447 | – | 1,479 | – | 79 | – | 766 | 80,416 |
| Rates: Water | 114,977 | 93,075 | 14,443 | 2,958 | 1,531 | 9,930 | 693 | 105 | 2,928 | 1,231 | - | 15,299 | – | 257,170 |
| „ Lighting | – | 33,844 | 4,581 | 3,599 | – | 10 | – | – | – | – | – | 4,939 | – | 46,973 |
| „ Conservancy | 55,588 | 40,000 | – | 35,932 | – | 19,617 | 1,658 | 676 | 8,579 | 655 | – | 11,289 | 1,005 | 174,999 |
| „ Others | – | – | – | 53,555 | – | 12,641 | 4,468 | 1,625 | 5,148 | – | – | - | – | 77,437 |
| Total from Taxation | 515,171 | 381,981 | 74,654 | 209,606 | 131,292 | 272,859 | 239,712 | 287,596 | 109,083 | 9,314 | 19,634 | 82,372 | 23,773 | 2,350,047 |
| Rents, fees, fines, and miscellaneous | 97,016 | 129,171 | 26,660 | 44,535 | 49,198 | 80,464 | 68,432 | 80,315 | 15,617 | 4,021 | 35,505 | 86,221 | 11,136 | 728,291 |
| Total Revenue | 612,187 | 511,152 | 101,314 | 254,141 | 180,490 | 353,323 | 308,144 | 367,911 | 117,700 | 13,335 | 55,139 | 168,593 | 34,909 | 3,078,338 |
| Grants from State funds | – | – | 3,951 | 2,283 | 32,311 | 16,169 | 103,875 | 18,363 | 6,607 | 2,087 | 208 | 40,572 | 240 | 226,726 |
| „ „ local „ | – | 889 | – | 3,211 | 7,960 | 8,050 | 3,038 | 9,472 | 395 | 65 | – | 20,258 | 50 | 53,388 |
| „ „ other „ | – | 2,205 | – | 5,673 | 1,484 | 3,017 | 2,996 | 443 | 19,450 | – | – | 124 | 1,750 | 37,142 |
| Total Grants | – | 3,094 | 3,951 | 11,167 | 41,755 | 27,236 | 109,909 | 28,278 | 26,452 | 2,152 | 208 | 60,954 | 2,040 | 317,256 |
| Loans and deposits | 5,768,691 | 251,104 | 35,401 | 25,115 | 26,218 | 53,824 | 177,282 | 46,622 | 27,424 | 125 | 4,136 | 45,882 | 18,956 | 6,480,780 |
| GRAND TOTAL RECEIPTS | 6,380,878 | 765,350 | 140,666 | 290,423 | 248,463 | 434,383 | 595,335 | 442,811 | 171,576 | 15,612 | 59,543 | 275,429 | 55,905 | 9,876,374 |
| EXPENDITURE: | | | | | | | | | | | | | | |
| Administration and collection | 50,141 | 48,248 | 9,460 | 33,584 | 16,876 | 51,078 | 41,447 | 56,798 | 33,505 | 1,964 | 7,816 | 22,824 | 5,407 | 379,148 |
| Public safety | 66,312 | 38,584 | 5,093 | 19,066 | 9,298 | 22,552 | 53,057 | 60,494 | 1,001 | 362 | 14,736 | 11,653 | 3815 | 306,023 |
| „ health | 438,658 | 239,936 | 53,910 | 126,118 | 84,268 | 166,651 | 273,936 | 154,560 | 61,665 | 7,475 | 14,365 | 80,675 | 27,833 | 1,730,050 |
| „ convenience | 200,488 | 176,301 | 19,311 | 58,507 | 43,251 | 66,271 | 59,786 | 59,622 | 14,608 | 3,995 | 22,050 | 67,718 | 10,426 | 802,334 |
| „ instruction | 8,072 | 1,436 | 1 941 | 13,007 | 28,262 | 63,535 | 12,365 | 53,187 | 11,345 | 467 | 300 | 22,843 | 2,344 | 219,104 |
| Miscellaneous | 154,801 | 117,835 | 21,254 | 15,536 | 10,646 | 28,226 | 43,182 | 37,294 | 6,084 | 61 | 3,075 | 23,036 | 4,371 | 465,401 |
| Total Current Expenditure | 918,472 | 622,340 | 110,969 | 265,818 | 192,601 | 398,313 | 483,773 | 421,955 | 128,208 | 14,324 | 62,342 | 228,749 | 54,196 | 3,902,060 |
| Investments, repayments, and deposits | 5,477,061 | 74,774 | 36,965 | 21,194 | 26,569 | 46,618 | 43,426 | 13,486 | 10,563 | 502 | 1,747 | 67,748 | 1,932 | 5,822,585 |
| GRAND TOTAL EXPENDITURE | 6,395,533 | 697,114 | 147,934 | 287,012 | 219,170 | 444,931 | 527,199 | 435,441 | 138,771 | 14,826 | 64,089 | 296,497 | 56,128 | 9,724,645 |
| Balances Opening | 33,016 | 61,714 | 51,318 | 36,086 | 54,479 | 161,391 | 56,689 | 77,865 | 40,028 | 1,462 | 17,593 | 65,097 | 10,797 | 667,535 |
| Balances Closing | 18,361 | 129,950 | 44,050 | 39,497 | 83,772 | 150,843 | 124,825 | 85,235 | 72,833 | 2,248 | 13,047 | 44,029 | 10,574 | 819,264 |

The general statement indicates how the different provinces vary as to their predilection for special forms of taxation. But throughout the greater part of India there is one general sentiment, and that is the dislike of direct taxation in any shape but that of assessment on agricultural holdings, to which the people have become inured by long usage. The house, for example, is by no means always a sure indication of the income and resources of its owner. Many men of good family have to reside in an ancestral dwelling which they can ill afford to keep in repair, and, on the other hand, as the simple standard of life is slow in advancing, the millionaire merchant, whose prosperity dates from the last generation only is well content to continue to live cramped in the small rooms of the house in which his father amassed his wealth. It is not, therefore, a matter for surprise that, even apart from the fascination of levying a tax upon strangers as well as upon one's own fellow townsmen, the most popular impost in India is that of octroi, or town duties. The general estimate of the insignificance of the burden of this mode of contributing to the public funds is well exemplified in the vernacular term applied to it in some form or other from the Panjab to the Deccan, and which may be rendered in English by "handful." A cartload of grain or other goods passing the town gate, it is argued, can well afford to surrender a handful, in return for the privilege of admission to the market, passage along the town roads, or the protection provided by the town authorities during a night's halt, a consideration in former times of some value. In some provinces, as observed above, these duties are not levied, but their importance in the municipal finance elsewhere can be appreciated from the marginal statement, in which is given the ratio borne by the income derived from them in 1891–92, to the total current revenue of the corporations concerned. As regards Bombay, it must be mentioned that the ratio is considerably raised by the inclusion of the Sindh municipal figures, since in that division of the Presidency the octroi receipts are in the proportion of nearly 55 per cent. to the total. The incidence per head is added in the case of the four chief provinces only, since the population of the towns where octroi is levied in the last aggregate of municipalities is not set forth in the returns. The levy of such a tax is open to several very obvious objections, and its working has been watched, accordingly, by the Government of India with much attention. In the case of towns on through routes of traffic the main difficulty is to prevent the impost either from degenerating into one of the vexatious transit duties, once almost universal in India, and in the abolition of which the Chiefs of the protected States have shown such loyal co-operation during the decade under review, or from diverting traffic into other and less convenient channels. Where the town is off the main line of trade, and is of the nature of a centre of distribution for the rural tract surrounding it, the tendency of octroi which has to be checked is to raise the price of the commodities on which it is imposed amongst a population which derives little or no gain from municipal expenditure. In connection with the first matter, it has been provided that no articles of general trade, or of which the local consumption is in but low proportion to the amount that enters the town, or again on which Imperial taxation is already levied under the Sea Customs Act, shall be included in the octroi schedule of any town. A further precaution is taken in the same direction by prescribing liberal rules as to the refund of duty on goods passing out of the town. This forms, in fact, the chief safeguard in the present day against the abuse of the octroi system. In 1891–92, in the North-West and Central Provinces, the duty refunded in accordance with the above rules amounted to 22 and 26 per cent. respectively on the total levied. In the Panjab and Bombay, excluding Sindh, the proportion was about 6 per cent. only. In Sindh the refunds are set down at Rx. 59,735, whilst the net receipts were but Rx. 48,160. The system of bonded warehouses, so efficient in securing the object in view in other countries, appears from the experience of several years to be alien to the tastes and habits of the Indian trader, and is not therefore

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Octroi.

| Province. | Per-centage on Total Revenue. | Incidence per Head. |
|---|---|---|
| | | *Rs.* |
| Bombay and Sindh - | 43·3 | 0·745 |
| North-West Provinces and Oudh - - - | 67·5 | 0·721 |
| Panjab - - - - | 73·5 | 1·208 |
| Central Provinces - - | 68·1 | 1·095 |
| Berar, Ajmer, &c. - - | 59·7 | — |

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therefore, likely to be materially extended. The working of the octroi system in any particular town is tested in a rough way by applying certain standard rates of consumption of the chief staple commodities of the local trade. Wherever the taxed quantity of these articles respectively exceeds the standard to a significant extent, it is to be assumed that the excess is consumed beyond the limits of the town, so that the octroi has become a transit duty, and measures to repress its exuberance are forthwith prescribed. But in the case of towns not on the through lines of trade, it may be assumed that the population of the country round habitually use the market and other urban conveniences, so that the exact maintenance of the standard of consumption is not rigidly enforced or required, and the case is met by low rates of taxation with free refund of duty when the articles are exported. The above method of appraising the results of this tax is admittedly but approximately correct, as the standard is liable to be more or less arbitrary in spite of the care taken in adjusting it by minute inquiries to local customs and circumstances; and in many of the middle-class towns, especially those containing popular shrines or bathing places, the periodical influx of crowds of pilgrims and other visitors is enough to affect the incidence of the taxed imports for the whole year. The Government of India, in reviewing the whole subject in 1888, came to the conclusion that the history of the administration of the octroi during the preceding eight years had been one of progressive improvement, and showed that the local authorities were making everywhere sedulous efforts to remove the features in the working of the tax that experience had shown to be most open to objection. From the annual reports, however, since the date of that review, it is clear that there is room for still more improvement, if the standards of consumption be accepted as accurate, but the supervision and attention that is now given to the subject is evidently gradually reducing the scope of the taxation to its due limits.

In connection with the general subject of municipal finance, the following statement of the course of municipal taxation during the decade will perhaps be found of interest. Considering the great fluctuations of the receipts from miscellaneous sources and from State grants in aid of special objects, it is not worth while to show the incidence of the total receipts, especially as the subject of State loans will receive notice at the end of this

| PROVINCE, &c. | Incidence of Municipal Taxation per Head of Municipal Population, in Rupees and Fractions of a Rupee. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1881–82. | 1882–83. | 1883–84. | 1884–85. | 1885–86. | 1886–87. | 1887–88. | 1888–89. | 1889–90. | 1890–91. | 1891–92. |
| | *Rs.* | *Rs.* | *Rs.* | *Rs.* | *Rs.* | *Rs.* | *Rs.* | *Rs.* | *Rs.* | *Rs.* | *Rs.* |
| Madras | 0·74 | 0·73 | 0·83 | 0·75 | 0·78 | 0·75 | 0·77 | 0·79 | 0·82 | 0·72 | 0·79 |
| „ City | 1·68 | 1·83 | 1·70 | 1·99 | 2·52 | 2·15 | 1·94 | 1·98 | 2·18 | 1·92 | 1·94 |
| Bombay | 1·22 | 1·19 | 1·24 | 1·21 | 1·20 | 1·28 | 1·28 | 1·87 | 1·20 | 1·20 | 1·17 |
| „ City | 3·52 | 4·27 | 3·41 | 3·90 | 4·22 | 4·69 | 4·67 | 4·40 | 6·15 | 6·37 | 6·29 |
| Bengal | 0·67 | 0·69 | 0·69 | 0·75 | 0·76 | 0·77 | 0·79 | 0·82 | 0·75 | 0·75 | 0·77 |
| „ Calcutta | 5·37 | 6·14 | 6·31 | 6·41 | 6·53 | 6·99 | 7·20 | 7·71 | 6·51 | 6·42 | 5·75 |
| North-West Provinces and Oudh | 0·72 | 0·63 | 0·71 | 0·66 | 0·63 | 0·64 | 0·70 | 0·69 | 0·72 | 0·71 | 0·73 |
| Panjab | 1·10 | 1·12 | 1·15 | 1·10 | 1·15 | 1·14 | 1·11 | 1·24 | 1·29 | 1·23 | 1·43 |
| Central Provinces | 1·02 | 1·14 | 0·90 | 0·85 | 0·87 | 0·80 | 0·76 | 0·89 | 1·14 | 1·45 | 1·45 |
| Assam | 0·74 | 0·69 | 0·72 | 0·74 | 0·83 | 0·76 | 0·96 | 0·86 | 0·94 | 0·86 | 1·20 |
| Lower Burma | 2·86 | 1·66 | 1·93 | 1·84 | 2·12 | 2·00 | 2·54 | 2·18 | 2·47 | 2·08 | 1·21 |
| Upper „ | – | – | – | – | – | – | – | 0·81 | 1·53 | 0·91 | 0·59 |
| Small Provinces | 0·38 | 1·21 | 1·37 | 1·28 | 0·78 | 0·88 | 0·89 | 0·83 | 0·91 | 0·95 | 0·97 |
| INDIA | 1·13 | 1·31 | 1·24 | 1·29 | 1·32 | 1·38 | 1·41 | 1·43 | 1·52 | 1·56 | 1·49 |

chapter. It must also be noted that in some three or four cases the town population has not been brought up annually to date, so that for several years running the incidence has been returned on the same base, regardless of births, deaths, or migration. Again, in many, if not in most, cases, the figures resulting from the last census have been adopted suddenly for the year in which they were compiled, helping thereby to unduly lower the incidence.

An

MUNICIPALITIES.

An account of the Presidency Corporations is not out of place as they differ very considerably from the Municipalities, the constitution of which has been reviewed above, and the section will conclude with a brief abstract of the proceedings in the latter during the year 1891–92.

The Presidency towns.

The three Presidency towns of Calcutta, Madras, and Bombay, have always been under municipal regulations of their own. So far back as 1687 the Court of Directors ordered that a Corporation should be formed at Madras containing both European and Native members, with a special view to the levying of local taxation. This Corporation consisted of a mayor, twelve aldermen, and 60 burgesses; but it does not appear to have been long lived. The mayor's courts, composed of a mayor and nine aldermen, which were established by Royal Charter at Calcutta, Madras, and Bombay in 1726, were courts of judicature rather than administrative Corporations. The first distinct authority to levy taxation for local purposes was derived from the Regulating Act (33 Geo. 3, c. 52), which empowered the Governor General to nominate covenanted servants of the Company and other British inhabitants to be Justices of the Peace, whose Commission issued from the Supreme Court in the name of the Crown, not of the Company. Following the precedent of the English Highway and Licensing Acts, these Justices of the Peace were empowered to appoint scavengers for cleansing the streets of the three towns in question; to order the watching and repairing of the streets; to make assessments for these purposes, and to grant licenses for the sale of spirituous liquors. After several intermediate statutes, the municipal constitution of the three towns was entirely remodelled by a series of Acts passed by the Legislative Council of India in 1856. A body corporate was established for each, under the style of Municipal Commissioners, composed of three salaried members, of whom one was to be President. Except in Bombay all the Commissioners were appointed by the Government; at Bombay the President alone was so appointed, and the two others by the Justices of the Peace. To this body large powers of assessing and collecting rates and of executing works of conservancy and general improvement were entrusted. So far, the three Presidency towns had been substantially subject to a uniform system of municipal administration. But henceforth the systems diverged, in accordance with the local legislative independence restored in 1861.

Calcutta.

The Calcutta Municipality was remodelled by the Bengal Legislature in 1863, in 1876, and again in 1888. By the first Act the Corporation was composed of a salaried Chairman appointed by the Government, together with all Justices of the Peace for the Province resident in the town, and all Justices of the Peace for the town only. All executive authority was vested in the Chairman, but the Justices (many of whom were natives) had a large measure of financial control. The first duty of the reformed corporation was to raise money for a water supply and a system of drainage. The system of nominated Justices of the Peace was open to the objection that, out of about 129 qualified persons, only about 25 took an active part in municipal affairs. Election by the ratepayers had already been introduced in Bombay, and was now demanded for Calcutta also. By the Act of 1876 the Calcutta Corporation consisted of a Chairman, who was also Commissioner of Police, together with 72 Municipal Commissioners, two-thirds of whom were elected by ratepayers to the amount of Rx. 2·4 per annum, whilst the remaining third was nominated by the Local Government. The elections took place every three years, in 1876, 1879, 1882, and 1885. The voting was conducted by papers, forwarded by post to the persons whose names were on the register. In 1882 out of 10,587 voters, 9,180 recorded their votes. In 1885, out of 9,548, the voters numbered 8,975. The falling off was due to better scrutiny of the claims. In 1888 a new Act was passed by the Local Council, and the first elections under it took place in March 1889. Instead of voting by papers previously distributed, the vote had to be given in person. The qualifications were the same as before, and a certain amount of plural voting was allowed. Thus, the number of voters being 11,664, the voting power was found to be 46,402, and the total votes given amounted to 13,145, by 3,369 persons. As the number of voters in the wards where the seat was contested was 7,976, about 43 per cent. of them came

MUNICIPALITIES.

came to the poll. The marginal statement shows the distribution by race or religion. The assiduity of the Musalmans and the abstention of the European are the chief features in the proportions set forth. It may be added that the new Corporation initiated its term of office by a decided advance in the average attendance at the Committee and other meetings, and in the general interest shown in their duties. In the latter respect, too, subsequent years have brought no diminution.

| Race or Religion. | Registered. | Voted. | Elected. | Nominated. | Total on Corporation. |
|---|---|---|---|---|---|
| Hindus | 7,964 | 2,303 | 35 | 3 | 38 |
| Europeans and Eurasians | 2,340 | 445 | 9 | 14 | 23 |
| Musalmans | 1,286 | 608 | 6 | 5 | 11 |
| Parsis | 29 | 1 | – | 1 | 1 |
| Chinese | 9 | 3 | – | – | – |
| Jews | 36 | 4 | – | 2 | 2 |
| TOTAL | 11,664 | 3,369 | 50 | 25 | 75 |

Calcutta is a remarkably difficult administrative charge. In the first place, it lies on a dead level, a feature that renders drainage and water-service matters of the utmost expense and trouble. Then, again, it includes numerous plots of land which are let out by their proprietors as sites for collections of huts, huddled together regardless of sanitation, and with strong rights against municipal action. Finally, it is surrounded by suburbs, which the census showed to be increasing at a greater rate than the City proper. All of these were under separate Muncipal management, independent of the Metropolis, till the new Act came into force, in 1889. Yet the sewers, gas and water pipes of the latter passed through several of its insanitary satellites. Complaints against the sanitary administration of Calcutta grew so strenuous in 1883 and 1884, that on a memorial forwarded to the Local Government by a body of the ratepayers, a Joint Commission was proposed by the latter to arrange for a general scheme of sanitation and improvement. The then Corporation, however, declined to accept the suggestion, but as the complaints seemed well-founded, the Lieutenant Governor appointed a Commission of three members, one of whom was to be selected by the Corporation, to inquire into the whole question. The report of this Commission, whilst giving credit to the Municipality for their control of the finances entrusted to them, showed that the expenditure on the cleansing and conservancy of the town had not been on a scale commensurate with its requirements, and recommended certain undertakings that seemed urgently needed. At the same time, the amalgamation with Calcutta of seven of the suburban Corporations, containing a population in 1881 of about 158,000, was recommended, on the understanding that not less than a certain sum should be expended by the Municipality on their requirements. The Act of 1888 provided for this, and the agreement has been amply fulfilled, since in the last year of the decade under review a sum of Rx. 850,000 was spent on the extension of the water-supply, on the drainage and on the communications, within the above area. The importance of an improved water-supply in this city is proved by some figures quoted in the review of the administration of the Municipality for 1890-91. In the five years antecedent to the introduction of filtered water into the city, the deaths from cholera were registered as 18,422. In the next five years, they fell to 5,922, with a slight increase soon after. In 1888, the extension of the water scheme again reduced the number, and on the whole, the mortality from this scourge has fallen to little more than a fourth of what it was twenty-one years ago. In connection with the general mortality, too, it should be mentioned that the suburbs show a vastly higher rate than the city, traceable mainly to their insanitary conditions and want of a supply of good water. In Calcutta, as in other large towns of India, the introduction of filtered water was most vigorously opposed, on grounds of caste-disabilities to its use, to be followed by equally loud complaints about the inadequacy of the quantity made available. At the end of the period now in question, there were about 267 miles of pipes laid, almost completing the project as enlarged to include the suburbs. The supply averaged 36 gallons of filtered water per head in the city, and a trifle over 15 in the suburbs, not to mention about 10 gallons in the town of unfiltered, for washing and household

household purposes. The drainage system, too, has been extended, and some 200 miles of sewer-pipes are laid in the city. The question of surface-draining the suburbs is now occupying the attention of the Corporation, but it is attended with very considerable difficulties. The improvement of the collections of huts, known as basti, to which attention was called above, has being of the chief local troubles with which sanitation has to deal, has been carried on fairly rapidly during the ten years with which we are concerned. So far back as 1868 the then Health Officer called loudly for reform, and the Local Government issued stringent orders that the sanitation of these localities, the state of which was described as scandalous, should never be dropped out of sight by the Corporation. It was specified that no immediate substitution of regular streets with model masonry houses was required, but gradual improvement in the way of ventilation, alignment of roads, the substitution of stand-pipes and bathing-platforms for cesspools, provision for due access by the conservancy carts of the municipality, and connection with the general drainage system, all this could, it was decided, be undertaken without undue disturbance of private rights, and it is on these lines that the Corporation has been working. MUNICIPALITIES.

That the primary need of Calcutta is sanitation, is a fact that can be appreciated from the admission that cholera is, practically, endemic there, so that all foreign ports are on the look out for the chance of imposing quarantine on vessels starting from it.

Fortunately, the financial position of the metropolis is sound, and a loan that was raised a couple of years ago, at 4½ per cent., was subscribed for six times over. Excluding special funds, the Corporation owed on the 1st January 1882, Rx. 1,240,227, and in March 1892, Rx. 2,323.917. The revenue during 1881 amounted to Rx. 265,992, and the expenditure to Rx. 316,244. In 1891-92, the revenue, from the enlarged area, it must be recollected, reached Rx. 456,508, and the expenses, Rx. 449,886. The mean incidence per head was Rs. 5·75, falling to Rs. 2·69 in the suburbs, and rising to Rs. 7·25 in the city. On the annual valuation of assessable property the rates now fall in the proportion of 19½ per cent. The year opened with a balance of Rx. 80,959, and closed with one of Rx. 158,859. The revenue receipts were Rx. 433,048, and those on the capital account Rx. 318,477. The expenditure charged against revenue is set down at Rx. 423,426, with Rx. 250,199, on the capital side of the account. The difference between these figures and those quoted above is due to the inclusion in the latter under departmental heads of some of the "contributions" to special services, such as water and lighting, to make up deficiencies in the receipts. The main heads of both revenue and expenditure are given below :—

| Revenue. | | Expenditure. | |
|---|---|---|---|
| Head. | Amount. | Head. | Amount. |
| | Rx. | | Rx. |
| General rate (9½ per cent.) | 160,715 | Administration and collection | 52,020 |
| Sewage rate (2 per cent.) | 33,824 | Road Department | 43,438 |
| Water rate (6 per cent.) | 93,075 | Cattle Department | 20,604 |
| Lighting rate (2 per cent.) | 33,844 | Conservancy charges | 16,536 |
| Taxes on professions, &c. | 52,511 | Sewer cleaning, &c. | 5,793 |
| Market receipts | 12,248 | Drainage, pumping, &c. | 3,237 |
| Conservancy receipts | 6,574 | Storm-water drainage, &c. | 3,703 |
| Other items | 30,902 | House-drainage, &c. | 1,712 |
| Contributions to meet deficiencies of special funds. | 22,272 | Sewage rate fund | 34,788 |
| Adjustment | 10,543 | Water rate fund | 110,648 |
| | | Lighting rate fund | 37,671 |
| | | Improvements (contribution) | 4,565 |
| | | Hospitals and vaccination | 5,293 |
| | | Education | 293 |
| | | Interest on loans | 44,719 |
| | | Contributions towards repayment | 18,663 |
| | | Other charges | 46,203 |
| TOTAL Rx. | 456,508 | TOTAL Rx. | 449,886 |

Municipalities.

The small amount expended on education has attracted the notice of the Local Government, as it amounts to no more than Rx. 293, on 66 schools, without specifying the number and sex of the pupils attending them, and before the inclusion of the suburbs, nothing was so spent at all, whilst the provincial grant for primary education alone was in the year in question Rx. 4,418. The Sub-Committee appointed to inquire into this matter had not communicated the results of its investigation by the end of this period to which this review relates.

Bombay City.

The Bombay Municipality was established, like the rest of the Presidency Corporations, by Acts of the Government of India, in 1856. It was remodelled, however, to suit the expansion of the city and its trade, in 1865, by the local legislature. Seven years later, again, it was found necessary to effect modifications on a wider scale, and the elective principle was introduced for the first time to an Indian community. In 1878 the law was further revised, and ten years later, in 1888, a consolidating Act was passed by the Bombay Council, under which, as amended in one or two clauses by another Act of the same year, the affairs of the city are now administered. So far as regards the executive action of the municipal authorities, the law had remained until the date last mentioned much as it was in 1856, irrespective of the great increase of the city in wealth and population, and the growing complexity of its relations with foreign countries and with other parts of India. Under the Act of 1865, the Municipal Commissioner exercised almost uncontrolled power over the finances of the Corporation, in spite of the theoretical revisional power of the town council. By the Act of 1872, two representative bodies were created. First, the Corporation, 64 in number, half of whom were elected by the ratepayers possessing a certain property qualification, and the rest, in equal shares, by the Local Government and the local Justices of the Peace. From the Corporation was chosen a body of 12, constituting a town council, four nominated by the Government, and the rest by the Corporation. The latter body elect its own president, whilst the chairman of the council was nominated by the Government. Under the new Act, the number of members of the Corporation is raised to 72, of whom 36 are to be elected in the wards, a subdivision of the city that is now statutorily recognised, 16 by the Justices, two by the Senate of the University, and the same number by the Chamber of Commerce. Sixteen, including the Commissioner, are to be nominated by the Government. The town council remains the same in constitution, save that the Municipal Commissioner is by virtue of his office a member of it, and it has the privilege of electing its own chairman. The relations between the Municipal Commissioner and the two other sections of the Corporation, and their respective position, powers, and responsibilities, which were not based in the former Acts on any clear general principle, are now defined.

The system of administering by mixed committees such matters as the affairs of elementary schools and of aided hospitals and dispensaries, has been legalised, and provision made for the distribution of work in connection with other and more purely municipal matters between sub-committees. Fresh powers as to loans are given, and the rules relating to such contentious subjects as new drainage, street widening, and the like, are brought into line with the English law on the points wherever it can be applied with advantage to local circumstances. An important addition is the provision that work affecting the water supply and drainage of the city shall only be executed by persons licensed in that behalf, a point that had been dealt with previously in the bye-laws, and there only in connection with the water-works. Surveyors, to act in connection with the new building clauses are also to be henceforward licensed under the Act, and the relations between the fire brigade and the insurance companies, as to cost of maintenance, are placed on a better defined footing. Many other deficiencies in the previous law are here supplied, and, in fact, the whole working of the Corporation, in the larger, not the local, sense of that title, is brought into harmony with the present requirements of the city.

The

The elections held at the end of January 1892 under the new Act resulted in the following return :— BOMBAY CITY.

| Religion. | Elected | | Nominated | | | Total. | Ratio of each Religion to | |
|---|---|---|---|---|---|---|---|---|
| | By Ratepayers. | By Justices. | By Chamber of Commerce. | By University. | By the Government | | Total Population. | Total Council. |
| Christian | 3 | 4 | 2 | 1 | 10 | 20* | ·055 | ·274 |
| Hindu and Jain | 17 | 2 | – | – | 3 | 22 | ·692 | ·301 |
| Musalman | 7 | 1 | – | – | 2 | 10 | ·189 | ·137 |
| Parsi | 9 | 8 | – | 1 | 2 | 20 | ·058 | ·274 |
| Jew | 0 | 1 | – | – | – | 1 | ·006 | ·014 |

* Europeans, 17; Natives and Indo-Portuguese, 3.

The Municipal Commissioner, a European official, is included.

With the exception of the two largest communities, which include the masses of labouring, seafaring, and artisan population, the representation is above the numerical proportion, and in accordance with the administratively effective distribution of the townsmen. No distinction is here drawn between officials and the rest, since in the Presidency towns there are many functionaries paid by the State, yet distinct from the ordinary staff engaged in executive and administrative duties. For example, in the council in question, there are several medical and educational officials, besides the representatives of the Port Trust, and the police commissioner, whose relations are practically closer with the corporation than with the State.

The demands made upon municipal resources in this city are peculiarly heavy. In the first place, the road system has to be maintained on an extensive and costly scale, by reason of the annually increasing dock traffic and the growth of the cotton and other industries. Then, again, the island has no local water supply, and, like the other Presidency towns, the greater part of its area is so flat that drainage has to be conducted to a great extent by artificial means, at expensive pumping stations. Another defect is the circumscribed area available for the extension of building, compatibly with due regard for ventilation and other sanitary requirements. It is true that amongst the middle classes, and, in less degree, among the lower, the last ten years have seen the usual tendency to move to the outskirts, in which they are aided by the service of trains on the suburban lines; but, so far as the great mass of the business population is concerned, the pressure in the central parts of the town seems to have reached its maximum, and during the period under review consideration had to be given to the best system of local expansion, and a special committee deliberated on this important subject. In the matter of drainage, the progress made during the last ten years has been retarded to some extent by the want of a complete and practicable general scheme. The difficulties against which the municipality has to contend arise not only from the dead level of the tract to be drained, but from the heavy rainfall, which averages nearly 75 inches in the year, and is concentrated, for the most part, into the space of three months. Thus the accumulation of storm-water is large and rapid, so the means of carrying it off have to be considered quite irrespective of the sewerage. The whole case was investigated by Mr. Baldwin Latham, who submitted alternative schemes early in 1890, under one of which the storm-water is being dealt with, and the substitution of improved pumping machinery in connection with the other part of the plan is in progress.

The water supply has been dealt with more satisfactorily, and it is hoped that the scheme now in operation is final. The original works started from a lake artificially made in a valley a few miles inland, and about 15 miles from the city. This project, known as the Vehar work, was completed in 1860, and gave a supply of some 8,000,000 gallons daily. This was soon found to be insufficient, and the rainfall was by no means certain enough to ensure the filling of the lake to the required height, so in 1872 a second lake called the Tulsi was formed by damming a higher valley. Subsequently it was found advisable to constitute this an independent source, in place of a supplement to the Vehar supply. Reservoirs were built accordingly in the higher parts of the city, and filter beds constructed. The supply was also

also increased by the cutting of channels in various parts of the catchment area. In the meantime, a special survey was made of a project that had been mooted years before, but not taken into consideration, whereby a plentiful supply of water should be introduced from a river rising in the Ghat range of hills, over 50 miles from the island, and which had formed a valley that could, with much trouble and expense, be formed into a lake. On receipt of the complete survey and details of the proposal the municipality had the enterprise to launch it by means of a fresh loan. To help in bridging the interval before so vast an undertaking could be got into working order, a second bye-project was carried out in the shape of a smaller reservoir at Pawai, on a neighbouring island, situated so that the water could be pumped into the Vehar mains; this last was completed before the summer of 1890, and worked well enough so long as it was required. The crowning of the 30 years of municipal efforts in this direction took place in the last day of March 1892, when the Tansa water was let into the main by the Viceroy, who visited Bombay for the purpose. The lake and the works in connection with it took six years to complete, and cost Rx. 1,500,000. It is situated 54½ miles from the city, covers six square miles, and is filled by 40 inches of rain, in a tract where double that quantity is almost a certainty every year. The masonry dam forming it is nearly two miles long, the largest of its class in the world. The supply is calculated at 20 millions of gallons daily, and it is stated that even in the driest season there will be no falling off sufficient to justify any apprehension of a scarcity such has been experienced on several occasions in the last 20 years.

The municipal assets at the end of 1891–92 were estimated at Rx. 5,279,279, whilst the liabilities, including deposits, amounted to Rx. 3,704,713. Out of a total outstanding debt of Rx. 3,553,077, as shown in the Government of India accounts, Rx. 2,836,550 was subscribed by the public direct, and the balance obtained through the State Treasury. The expenditure from borrowed money that has been incurred during the last five years is Rx. 1,795,661, or an annual average of Rx. 359,132. The following statement shows the current revenue and expenditure in the first and last years of the decade under review. It must be noted that the unexpended balance of the last loan for waterworks is not brought on to the revenue side, nor are nominal items, such as those on account of profit on adjustment of stock and adjustments for work done in the municipal workshops:—

| HEAD. | Revenue and Receipts. | | HEAD. | Expenditure. | |
|---|---|---|---|---|---|
| | 1881. | 1891–92. | | 1881. | 1891–92. |
| | Rx. | Rx. | | Rx. | Rx. |
| Consolidated Rate (8 per cent.) | 105,881 | 191,934 | Administration and collection | 28,630 | 46,592 |
| Town Duties | 63,748 | 84,022 | Police and Fire Brigade | 38,699 | 34,696 |
| Wheel Tax | 23,337 | 34,297 | Conservancy | 80,144 | 129,253 |
| Conservancy Rate | 28,180 | 55,588 | Public Works | 91,670 | 158,571* |
| Water Rate | 52,482 | 118,143 | Medical Aid | 2,043 | 5,028 |
| Licences | 30,538 | 32,990 | Education | 1,750 | 8,072 |
| Other sources | 83,203 | 91,496 | Payment of Debt | 74,721 | 163,741 |
| | | | Miscellaneous | 62,230 | 21,115 |
| TOTAL REVENUE | 387,369 | 608,470 | TOTAL CURRENT EXPENDITURE | 379,887 | 567,068 |

* Exclusive of Works out of Loans, to the amount of Rx. 342,054.

Thus, the revenue has grown by 57 and the expenditure by 49 per cent. in the 10 years. The increase in population was only 6·3 per cent. during the interval between the two years, but the census indicates that the stagnation, such as it is, is to be found amongst the non-productive classes, chiefly the wives and families of mill-hands and other labourers, whilst the assessment valuations and income-tax returns prove the greatly increasing wealth of the city as a whole. The incidence per head is unusually high, being 3·90 rupees in 1881 and 6·29 rupees in 1891.

The

Madras City.

The Madras Municipality was remodelled by the Local Legislature in 1867, 1878, and 1884. Under the first enactment, the city was divided into eight wards, with four members, residents of the ward, to each. All were nominated by the Government, and about a third were usually non-officials. Elective powers were granted but not put into operation. The President was appointed by the Government, and he nominated, in his turn, most of the other officers of the corporation. Some extension of the powers of the municipality as regards the application of its funds was made in 1871. In 1878, the elective principle was applied to one-half the commissioners, and two Vice-Presidents were appointed by the Government, one for public works and sanitation, the other to supervise the assessments and the collection of rates. The Act under which these changes took place was repealed in 1884, and in its stead the Legislature provided in that year for the election of 24 of the members by the ratepayers, and the nomination of eight by the Government in addition to the three officers above mentioned, it conferred, also, extended powers in regard to sanitation, besides remedying the former enactment in minor points where experience had shown it to be defective. The registered voters number less than 1 per cent. of the population, according to the last census, and the persons qualified to sit in the corporation are less than one in a thousand. During 1891-92 there were 21 elections held, at which the average proportion of the qualified voting power that came to the poll was only 39 per cent. Three of the persons elected were Europeans or Eurasians, and the rest Hindus. Among the seven nominated members who were appointed during the same year, three were Europeans and Eurasians, exclusive of two of the three officers of the corporation, one was a Hindu, two were Musalmans, and one a Parsi. Thus, the 35 members are comprised of 7 Europeans, &c., 2 Musalmans, a Parsi, and 25 Hindus.

The history of this corporation during the last ten years, like that of Calcutta, has been that of a struggle against nature on the questions of drainage and water supply. The city is situated in a plain, as flat and nearly as far from hills of any considerable height, as that which surrounds its sister on the Hughli. The main body of the population is crowded into what is known as the "Black Town," and the rest of the city is composed of various collections of houses, more or less closely packed. Some parts of this area drain into the sea, others on to a sewage farm, but for the Black Town itself, a large pumping station has to be provided, by means of which the sewage can be removed to some distance from the town. Considerable progress has been made with the latter scheme, and about 8,670 house-drains had been altered and repaired up to the end of the year 1891–92. A portion of the general scheme, relating to the southern suburb of Madras, has been postponed, pending the report on this, as well as a general water scheme, now under preparation by an expert, deputed for the purpose from England. In the mean time, though the sanitation of the town is engaging the attention of the Local Government, it appears that in the way of the scavenging arrangements for private houses and similar measures, there is much to be done. The number of latrines, for instance, is returned as one for every 2,066 inhabitants, or not much above one-half of the safe proportion. The death rate, too, is remarkably high, but this fact cannot fairly be attributed entirely to defective sanitation. Madras is far more normal in the distribution of its population than either Bombay or Calcutta, in the first of which only a quarter, and in the latter, less than a third, of the inhabitants are returned as city-born. In Madras over 70 per cent. are natives of the town, and there is little in the way of industry or shipping to attract the large throng of temporary immigrants that visit the two other capitals every year. Hence the number of infants in Madras is proportionately very high as compared with that which prevails elsewhere, and it is on the mortality amongst this class that the death-rate depends to a great extent, everywhere in India. It must also not be forgotton that in the absence of a large floating population, registration of domestic occurrences is far more easy, and the returns for Madras accordingly hold the first place in point of accuracy amongst the mortality bills of the country, and have served as the basis of the attempts that have recently been made to compute actuarially the life values of the population of southern India.

Madras City.

In the matter of water-supply Madras has been almost as hard pressed as with regard to the drainage. The main source of the present supply is a reservoir in what are known as the Red Hills, where a work executed before the advent of the British has been enlarged and utilised. In November, 1884, however, the embankment was breached during a cyclonic storm, and the whole supply of water was lost. For ten days the city had to depend upon a short supply from smaller tanks and from wells. Then the water of a more distant supply was conducted into the former channel, until the embankment was repaired. By the beginning of February, 1885, the temporary works were completed, and the water in the Red Hills' tank was thereby raised above the level of the off-take pipes. Since that date every year has seen some extension of the distributary system, but a fresh obstacle has of late arisen in the shape of a deterioration of the quality of the water. For instance, in 1891–92, samples were drawn from five different places, none of which was found to satisfy the analysing authorities, whether the water was taken from the lake itself, from the channel before entering the town, or from the taps in the town. The taxation imposed by the corporation falls very lightly on the population of Madras, and this is only to be expected, since the town has not the special features, commercial and industrial, of the other two Presidency cities, so its assessable value is relatively little in advance of that of the large towns in the interior. The incidence in 1881 was but Rs. 1·677, and in 1891–92, Rs. 1·942 per head of the population shown at the respective enumerations. The debt, incurred for the water and drainage schemes, amounted to Rx. 287,000 at the end of the year last quoted, and the Sinking Fund, to Rx. 85,877. The financial position of the corporation can be seen from the marginal abstract.

| HEAD. | 1881. | 1891–92. |
|---|---|---|
| | Rx. | Rx. |
| Opening Balance | 3,340 | 17,153 |
| Revenue and Receipts | 77,866 | 107,139 |
| Suspense Account | 15,964 | 9,077 |
| TOTAL | 97,170 | 133,369 |
| Current Charges | 71,195 | 115,367 |
| Suspense Account | 20,077 | 9,021 |
| Closing Balance | 5,898 | 8,981 |
| TOTAL | 97,170 | 133,369 |

During the year the Inspector of Local Fund Accounts was deputed by the Local Government to examine the accounts of the municipality, in order to see if a reduction could not be made in the establishment charges. The results are not yet to hand. The following statement gives the main heads of receipts and disbursement during the two years that bound the decade under review. Fresh taxation, to provide for additional expenditure on the water-supply, has been proposed, but was not brought into force by the end of the year.

| Revenue and Receipts. | | | Expenditure. | | |
|---|---|---|---|---|---|
| HEAD. | Amount. | | HEAD | Amount. | |
| | 1881. | 1891–92. | | 1881. | 1891–92. |
| | Rx. | Rx. | | Rx. | Rx. |
| Tax on houses and lands | 34,184 | 36,954 | Administration | 10,371 | 9,296 |
| „ vehicles and animals | 6,793 | 7,217 | Education | 1,049 | 1,001 |
| „ professions, &c. | 4,725 | 6,548 | Roads | 19,364 | 27,345 |
| Tolls | 4,098 | 4,910 | Conservancy | 21,980 | 35,603 |
| Water Rate | 11,902 | 14,443 | Hospitals, &c. | 2,172 | 5,761 |
| Lighting, &c. | 4,146 | 4,581 | Lighting | 4,181 | 4,775 |
| Miscellaneous and Contributions | 12,018 | 32,486 | Other Public Works | 2,926 | 11,958 |
| | | | Repayment of Debt, &c. | 9,152 | 19,628 |
| TOTAL | 77,866 | 107,139 | TOTAL | 71,195 | 115,367 |

The revenue, it appears, has outstripped the population in its growth, since the latter increased in the decade by 11½ per cent., and the former by 37, whilst the expenditure on conservancy, communications, and medical services, has expanded by over 58 per cent. As in Calcutta, little is spent on primary education.

## THE ADMINISTRATION OF DISTRICT MUNICIPALITIES DURING THE YEAR 1891–92.

MUNICIPALITIES, &c.

In reviewing the work of the minor municipalities of India, it is unnecessary to enter into minute detail, and the general features of the year's administration will alone receive notice here. In the Madras Presidency electoral privileges have been conferred on 32 out of 55 corporations. From two they were withdrawn during the year in question, and conferred on two others. In like manner, the privilege of electing their Chairman was withdrawn from three towns on account of internal dissensions and general inefficient work and supervision. The percentage of qualified voters on the population of the enfranchised towns was 2·3, an increase of 0·4 over last year's return. The interest in the elections, too, increased, as nearly 53 per cent. of the electors exercised their right of voting, and 130 seats out of 191 were contested. The attendance at meetings, again, showed an improvement in the right direction, whilst the number that had to be adjourned for want of a quorum fell off. On the whole, though the administration, as was mentioned in the review of the work of last year, leaves much to be desired, some improvement was manifested. The financial position has been set forth in the general table above given. As compared with the taxation revenue of the previous year, there was an increase of Rx. 15,600, but the rest of the improvement in receipts, which is obscured by a change in the form of accounts, seems to have been mainly attributable to grants from the State and local funds. In several towns the assessments have remained unrevised for a considerable period. The incidence of taxation, on the whole, is but 0·79 rupee per head. The expenditure, like the receipts, advanced mainly owing to the increased grants and investments. More was spent on drainage and waterworks. The rise in the proportion of the assignment of 13·6 per cent. of the income from taxation for education, that was expended on secondary institutions to the disadvantage of elementary schools, met with the disapproval of the Local Government. Municipal hospitals and dispensaries, on the other hand, seem to have grown in popularity. Vaccination has been made compulsory in 47 towns, or nine more than in 1890–91, and the outturn of work done, though considerably in advance of that of the year before, is still below what the Government expected from the number of men engaged to perform it. The general work of sanitation, though the returns show that a goodly number of schemes have been submitted to the sanitary engineer, or have been already taken in hand, languished, it is stated, owing to "the lack of interest in their duties displayed by the great majority of the councils."

Madras.

In the Bombay Presidency three municipalities were added to the roll, and two were suspended for incompetence and default of duty. A number of small towns on which it had been proposed to confer municipal privileges were left to the working of the Village Sanitation Act, or the supervision of the local boards, since it was found that the income they could fairly raise would be inadequate to provide funds for the fulfilment of the obligations imposed on them under the Local Municipal Act. Most of the towns of this class in which the municipality had been already notified and established, had scarcely begun active work under their new constitution, and the Government, in abolishing them, states that "it is worthy of note that this step met with no opposition in the towns concerned." The elections held during the year excited considerable interest, judging from the proportion of voters to electors, in the Southern division, and in certain important towns elsewhere; but in other towns, equally large, little attention is reported to have been paid to the matter. On the point of attendance at meetings, too, the Local Government finds a good deal of improvement is required, especially in some of the large towns, where, the Local Government observes, "meetings of the managing committees were altogether insufficient for the proper management of municipal affairs." The receipts of the municipalities, as a whole, increased this year by some Rx. 17,900, and the expenditure by Rx. 14,440. The net income from town duties (octroi) was almost stationary, but it is noticed that in Sindh the refund rules were more efficiently put into

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into force than before. In the Northern and Central Divisions, however, the test mentioned in a previous section of this chapter indicates the presence of some pressure on goods in transit, or consumed beyond municipal limits. The large amount, Rx. 18,830, of the outstanding balances attracted the notice of the Government, more especially in the case of large places like Ahmedabad, Poona, and Ahmednagar, in the first of which there was an extraordinary number of prosecutions necessary to stimulate payment of taxes overdue. As regards the expenditure, there is a satisfactory tendency to rise in the case of the assignments for works of sanitary and general public advantage, and the Bombay middle class towns stand high on the list of those which have effectively grappled with the question of a good water supply and general conservancy. Speaking generally, in the smaller towns of the Presidency, municipal government flourishes for the present only in proportion to the attention paid to it and the aid lent to the local body, by the District officer. In the larger towns there is much diversity. The general fault noted in the reviews is the tendency to allow party spirit and private faction to crowd out of sight the public duties owed by the members to the public for whom they act in municipal matters. At the same time, there are not a few signal examples of successful administration, in spite of local difficulties of this sort, and, in such places the progress not only of sanitation, but of the branches of education of which the municipalities are in charge, has repeatedly called forth the commendation of the officials whose duty it is to inspect and test it. In this respect, the reports on the two extremities of the province, Sindh and the Karnatak Division, are the most encouraging.

Bengal.

On the other side of India, the large Province of Bengal contained, as in 1890–91, 145 municipalities beyond the limits of that of Calcutta. In 117, two-thirds of the commissioners are elected, but in the 52 bye and general elections that took place during the year under review, only 37½ per cent. of the electors voted. The proportion of the population within district municipal limits to the total in the province outside Calcutta, is now 3·8 per cent. Out of these, 17·4 per cent. are qualified to vote, and, as above pointed out, less than two-fifths of the enfranchised availed themselves of their privilege. In the report on the municipal administration of last year, when the general elections took place, it was stated that the latter were, "in the great majority of cases, contested with some spirit," though, on that occasion, as on those under review, the spirit in question seems to have been exhibited by no more than 39½ per cent. of the electors, or 2 per cent. more than in the following year. The annual return includes an analysis of the composition of the existing commissions, from which it appears that the prevailing element is that of the legal practitioner, who runs parallel with the landholder. The official comes next, though at a long interval, and is followed by the trading community. It is probable that, so far as the lawyer and official are concerned, the above distribution will apply pretty fairly to many other parts of the country, though, as a rule, the schoolmaster is more, and the landholder less, prominent than in Bengal. The European and Eurasian element seems to have stood at about 9 per cent. for the last five or six years. The attendance at municipal meetings is, on the whole, decidedly good, as 102 out of the 145 towns secured the minimum number, against 83 who were in that position during the preceding year. The municipal income rose about Rx. 11,700 above that of 1890–91, that from taxation exceeding its predecessor by over 5 per cent. The assessments in some of the towns are held by the Local Government to be too light, considering the needs of the place and the very moderate limit of 7½ per cent. on the annual value of holdings. The incidence of municipal taxation, indeed, is light throughout the Province, and averages but 0·69 rupees per head. In cases where holdings are assessed, that is, the 36 wealthiest towns, the incidence of the tax on this class of property is only 0·56 rupees, and in the rest, 0·37 rupees per head. The necessity of providing more fully for urgent sanitary improvements is strongly pressed on the Commissioners by the Local Government in its annual review. The realisation of even the above light demand again seems to have been conducted rather laxly during the year, as only about 78 per cent. reached the municipal chest. Finally, as regards this part of the

the subject, it is remarked that in many cases the balance is allowed to accumulate to an amount unnecessarily large, without the excuse of the prospect of having to meet out of this source any specially expensive undertaking. On the expenditure side of the account, an increased attention to drainage schemes is noticeable, as well as in conservancy, to which last 30 per cent. of the whole was devoted. A tendency, not unusual in other provinces also, is here rather too prominent, namely, that of increasing the amount spent on establishment. As observed by the Local Government, "when work is not being well done, nothing is easier than to increase the establishment for doing it instead of replacing the inefficient officials by men of greater efficiency; and, again, there is a wide-spread belief that a few years' service gives an unanswerable claim to increase of pay. The development of these tendencies must be carefully watched, for both appeal to the charitable instincts of the municipal commissioners, which, however, can be indulged only at the expense of the ratepayers." Education, again, is an object on which the municipal expenditure is apt to drift, as shown in the case of the Madras municipalities, into an undesirable channel. In Bengal, during the year in question, the distribution of the grant for public instruction was in the proportion of 68 per cent. to secondary, and only 32 to primary and other institutions, and 43 per cent. of the pupils attended the former. The Local Government decided, accordingly, that in order to enable the municipalities to better fulfil their duties in this respect, somewhat more than four times the present grant made by them should be assigned to primary schools, and that not until this amount has been provided is any part of the funds to be devoted to secondary instruction. In the matter of supplying good water to the towns in sufficient quantity, considerable progress was made during the year in Dacca, where local munificence came to the aid of the municipality, Bardwan, Darjiling, Gaya, and other places. A tribute is paid by the Local Government to the aid given by the Provincial Sanitary Board in the way of advice as to improvements or new schemes. As regards the work of the year, as a whole, there may be said to have been marks of progress, but "the great cardinal principles of successful municipal administration are not yet sufficiently grasped. Assessments are still made with inequality, and, when regard is had to the requirements of the people, with too great leniency; collections are not enforced with vigour and punctuality, and owing to a mistaken gentleness in many cases municipal servants are in arrears, and the whole administrative machinery is thrown out of gear; the great needs of rich and poor alike,—thorough conservancy, good drainage, and a pure water supply, are too often neglected, and in some parts of the country there is a tendency to devote to secondary education for the benefit of a few the hard-earned contributions of the many."

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The number of municipalities in the North-West Provinces and Oudh was 103, of which six remain under the former Act of 1873, the rest being established under the revised enactment of 1883. There were elections in 65 municipalities, on which occasions only 26·7 of the qualified electors, who amount to 1·7 of the municipal population, exercised their franchise. There are *ex officio* chairmen in the six large municipalities where this precaution has been thought necessary, and elsewhere, in six cases only have non-officials been elected. The attendance at meetings was over half the number of members, and the number of the meetings too increased, though this is a comparatively slight test of the attention paid to business. There was an improvement of Rx. 103,088 in the revenue and receipts, spread fairly over the main items. The incidence of taxation is but 0·73 rupees per head of municipal population. The expenditure includes large sums devoted to the important water works in the towns of Benares, Agra, Cawnpore, and Allahabad, for which loans amounting in the year to Rx. 156,616 were obtained. These constitute the most important works of the year. In Benares, the erection of the pumping engines remained to be done, and pipe-laying was begun. The Cawnpore municipality was still engaged over preliminaries at the close of the year, as difficulties regarding the drainage project had arisen. The Allahabad works did good service throughout the year, though the water rate was not completely assessed in time to levy it. The extension of the

North-West Provinces and Oudh.

MUNICIPALITIES. Agra works is under consideration, and those for Lucknow, which are on the plan adopted for Allahabad, were begun just before the close of the year. The educational assignments present much the same features as those in Bengal, though in less pronounced a form. The Local Government, in reviewing the work of the corporations, as a whole, consider that the year, generally speaking, showed good results.

Panjab. Eight municipalities were abolished in the Panjab from the beginning of the year, in accordance with decisions passed during 1890–91. In every case the town was a small one and could be supervised by the District Board. A considerable number of elections took place, in a large proportion of which the retiring members were again returned, usually without contest. In certain cases the contest was keen, but fought out, as a rule, on religious grounds, the Musalman candidate being opposed by a Hindu. In Lahore, as has been observed in an earlier portion of this section, religion has been recognised in the division of the city into constituencies, and in each ward the votes of the Christian, Musalman, and Hindu electors are recorded for their respective candidates. Except where this consideration is very prominent, the proportion of the electors who vote is by no means high, and in many cases less than half the registered number came to the poll. The Deputy Commissioner of the Montgomery district, a Musalman of rank, in reporting the results in his charge, adds the following remarks on the short voting: "This fact tends to show that the people do not appreciate the elective system, which is calculated to create ill-feeling both on religious and private grounds. Friendly relations are frequently strained, and in their anxiety to avoid displeasure of any of the candidates, most of the voters keep aloof altogether." The number of meetings held and the average attendance at each varied considerably, as was noted in the review of the work of the preceding year, but a great deal of the detailed administration is now made over to sub-committees, which are able to devote more time to supervision, and whose work is favourably noticed, accordingly. In a few cases, as usual, the action of the municipality had to be overruled by the local authorities, and in all such instances, the decision of the latter was accepted without demur by the corporation. As a rule, the question was either a personal one, such as an encroachment on the public road, the repair of a private well or building, or an allowance to an individual deemed specially deserving of recognition by the corporation; or else, class or religious sentiment cropped up, as when a municipality exempted from taxation the cattle required for slaughter at an annual Musalman festival, or where a girls' school was established in circumstances that made it inadvisable for the Commission to embark in what was locally a delicate enterprise. But, on the whole, a great deal of good work, sanitary and for the public convenience, was got through, and though it is found that "members, particularly those who owe their position to election, are ever ready to oblige private individuals by a sacrifice of public rights," it may be observed that such a tendency is not unknown where representative institutions have flourished for a far longer time than that during which the towns in India have been going through their term of probation. The revenue from taxation during the year 1891–92 exceeded that of the previous year by Rx. 31,500, and there was an improvement in most of the other main heads, though, owing to the falling off in miscellaneous and occasional receipts, the total, exclusive of debt, was a trifle short of that of 1890–91. The expenditure, excluding debt, was less by an equivalent amount. The incidence of taxation per head stands at 1·36 rupees, or rather above the average, omitting the Presidency towns. A good deal was done during the year in connection with the improvement of the water supply. The great works at Delhi were opened. In Lahore, the existing provisions were extended to a large village in the neighbourhood, and the Amritsar municipality took up a project for a complete supply, in supersession of the present system of indenting upon the Canal Department for water. In Rawal Pindi the works were extended in the city, and those for Peshawar were completed. The Local Government notices, however, the large proportion of the Budget assignments that was allowed to lapse, by reason of delay in taking up or in pushing on such projects. The drainage project for Delhi was completed, and a loan is to be floated for its execution. In Simla

Simla, too, both the water supply and drainage are in the course of improvement. Little else in the review calls for special notice. MUNICIPALITIES.

In the Central Provinces, one municipality disappeared from the lists, and another was under sentence at the end of the year. In both cases the reason was the same as that on which the exclusion of such small towns is based in the Provinces of Bombay and the Panjab. An increase of one in the number of *ex officio* members is due to the appointment of an official to the Presidency of the Khandwa municipality, to retrieve the management of the octroi business of that town. On the whole, the attendance at meetings was fair, and the principal municipality, Nagpur, is specially mentioned for the efficiency of its work. In some other towns where the number of meetings and the attendance were satisfactory, the outturn of work is said to be incommensurate with the time spent in discussing it. In the smaller towns quiet progress is reported to have been made, and in one case only is any flagrant violation of duty noticed, and this was where the proposals for the revision of the scale of house assessment centred round large reductions made in the case of the property of the President and two of his municipal colleagues. The revenue, exclusive of loans, was Rx. 30,700 above that of the preceding year, and the expenditure rose by Rx. 10,400. The large refunds of octroi collections have been already noticed above, and show that the administration of this important item in the municipal income is improving, though there is reason to believe that further modifications are in some cases still required. A question that arose during the year, but which was left for separate decision, is that of the claim to refund of duty on account of material imported raw but exported manufactured. The local Administration records its opinion that on the whole, more attention is required to sanitation, except in the case of Nagpur. It is pointed out that there seems to be a general reluctance to institute prosecutions for breach of rules, even in the larger towns. This, however, is a point that is noticeable in most reviews of this class of work. In the matter of water supply, several important schemes were in progress during the year. In Raipur, the work was completed. The extension of the Nagpur works was carried out, and the municipality took steps towards acquiring the control over a portion of the catchment area of the principal reservoir, to protect it against pollution. A considerable sum was spent in Burhanpur on the water arrangements, and the Jabalpur Corporation are negotiating for a loan for the same purpose. Central Provinces.

In Assam there were three municipalities under the Bengal Act III. of 1884, three second class municipalities, under the Act of 1876, three Stations, and the same number of Unions. Since the close of the period with which this review is concerned, one of the Stations, Silchar, has been promoted to a second class municipality. The revenue increased by Rx. 2,956, and the improvement appears in each of the heads of taxation. Part of the growth is due to the introduction into the towns of Gauhati and Dibrugarh of the Latrine tax, leviable under the Act of 1884. The mean incidence of taxation per head was Rs. 1·14. The expenditure rose by Rx. 1,931, chiefly in water works and conservancy, a fact noted with satisfaction by the Chief Commissioner, especially as it is found in nearly all the towns concerned. The elections in Gauhati called forth over 70 per cent. of the total voting power, but in Dibrugarh only 35 per cent. answered to the call. In one municipality, Barpeta, the number of members originally sanctioned was found too large, so this year it has been reduced from fourteen to eight, for which seats suitable candidates are available. The financial administration of Gauhati called forth some unfavourable comments from the local Administration, but in other respects, there was little to record beyond a generally fair attention to their duties on the part of these small municipalities. Assam.

There is little to bring to notice as regards the administration of the municipalities in Berar. At the annual elections only 23 per cent. of the electors voted, and in the two chief towns the proportions were respectively 25 and 12 per cent. In the latter, the abstention was probably due, as in 1890-91, to the wish to testify to the dissatisfaction of the inhabitant with the municipal administration. The electorate comprises about 4½ per cent. of the municipal population. The income exceeded that of 1890-91 by some Rx. 3,000, and the expenditure grew by Rx. 3,690. The incidence of taxation Berar.

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taxation is shown as Rs. 0·70 per head, but the calculation includes, it is noted, certain items that cannot fairly be said to be derived from that source, so the burden is probably lighter than even that small sum. The main works in hand were the Akola water-supply and the drainage of Akot. A similar scheme to the latter is under preparation for Elichpur, and a plan for the water-supply of Shevgaon is proposed. Some improvement in the conservancy of Amraoti Camp is noticed.

Ajmer and Coorg.

The three municipalities in Ajmer-Merwara suffered during the year from the prevailing scarcity surrounding them. The increase in the income is chiefly nominal, as the actual receipts from the ordinary sources of revenue fell off. The octroi rules received attention, and partly owing to the revised scale, partly to smaller imports, the receipts under this head were only 60¾ per cent. of the total revenue, instead of 77 per cent., as in the preceding year. The main public undertakings of 1891–92 were the waterworks in Ajmer. The usual water-supply was exhausted early in the season, and as a tempory expedient, water was conducted to the city from the Budda Pushkar Lake. Then, again, a more permanent improvement was commenced in the shape of the Foy-sagar supply, from a tank a few miles out of the town. The former work was opened in April 1892, the latter at the end of November in the same year. In the small Province of Coorg there was nothing during the year to call for comment. The Resident observes that the Commissioners took greater interest in their work, the state of the funds was satisfactory, and that he has gratefully acknowledged the liberality of certain citizens in providing funds for the improvement of their native towns.

Lower Burma.

The last province in which municipal institutions have to be reviewed is Burma, which must be treated in two sections. In the Lower division the number of municipalities remains at 25, in addition to ten town committees, which are separately treated. In the yearly review nothing special is stated in connection with the elections that took place to fill vacancies, and from the detailed accounts there seems to have been nothing to record. The main interest of the year was centred in finance, as reductions had to be made in the provincial contributions, so that the exercise of strict economy was necessary in order to keep up the municipal efficiency out of purely local resources. The reductions in expenditure were made chiefly in the assignments for education, an object that is met by private religious institutions to a far greater extent than in the rest of India. There will be still a need, it is anticipated, of additional taxation to provide for efficient conservancy and other sanitary improvements. As it is, the revenue for the year from taxation, partly owing to ordinary expansion, partly, no doubt, to the imposition of new taxes, increased by Rx. 7,820, under all heads, and the taxation incidence amounted to 1·60 rupees per head. The expenditure, on the other hand, including debt, showed a slight decrease. It is worth note that, omitting the loan account, nearly two-thirds of the charges are on account of the head now known as that of public health and convenience. The administration and collection cost 10 per cent., and instruction 9. In the town of Rangoon, the Shon drainage system, opened last year, was got into working order, and nearly a thousand house connections were made during the year. The area with which it is connected has likewise been extended. Some experiments have been made, also, in the way of reclamation, by raising a portion of the waste land round the town, using it as public parks and places of recreation. The scavenging of the notoriously unsanitary suburbs has been attended to, with the result of lowering the death-rate considerably. In Maulmain the municipality was warned a year ago to take steps to put its affairs in order, and some attention has been paid to the requisition, but owing to the want of energy in providing the agency, the scavenging tax, which the corporation is entitled to levy, cannot be imposed. The smaller municipalities need no special comment in this review.

Upper Burma.

In Upper Burma, again has one municipality fallen out of the list, and there are now 16. The incidence of taxation is light, and averages but 0·60 rupees per head. There was a slight fall in revenue, owing, it seems, to laxity in collection of the assessed taxes in Mandalay, and to the loan transactions of the preceding year in Pyinmana. The expenditure, irrespective of debt, rose by some Rx. 1,400, and was distributed in the proportions of 58 per cent. on public health and convenience, 24 on public safety,

safety, and 12½ per cent. on administration and collection. Education needs and receives but little from the public funds in these towns. In the administration of the year there is little of special note. Propositions have been placed under considerations for increasing the taxation in the larger towns, the survey of Mandalay is making good progress, and a scheme for a water supply and another for making a neighbouring creek of the Irawadi navigable, are being matured. In Bhamo the expenditure was chiefly on a much wanted raised road between the two landing places. The administration suffered, it is stated, from the frequent change of official members, an inconvenience inevitable in a frontier town. The Vaccination Act, it may be noted, has been extended to six towns in this division. With Upper Burma this review of municipal work closes.

## LOCAL BOARDS.

The administration of the funds raised for local purposes through local agency is conducted on systems varying as to detail in each province, but in no case dating from more than five-and-twenty years ago. Speaking generally, the funds in question are derived from tolls, ferries, fees of various kinds, but mainly from a cess assessed on the land. Material contributions are, in cases of necessity, made by the local authorities from provincial funds, and in all cases a considerable portion of the provincial expenditure on roads, dispensaries, and schools is entrusted to local agency. The cardinal principle of the system is that the funds raised in the district shall be spent therein. At first, therefore, the administration was vested in a board for the whole district, or if, as in Madras and Bombay, there were established boards for the various sub-divisions, they were in great measure subordinate to the district board, and practically became its local agents for carrying out minor works for which it had allotted the necessary funds. Since 1883, however, the system has been revised on the same lines as that in force in municipalities. A certain proportion of the members of both boards are elected by constituencies duly qualified by payment of land revenue to a certain amount, by residence, or according to other tests, as the case may be. Delegates from the subdivisional board sit on the larger body, on which, too, the more important towns of the district are also represented. The position of the subdivisional corporation is also improved in relation to the larger board, and more scope for independent action is available. These points will be better appreciated from the summary given below of the system of administration that now prevails in each province. The following statement of the constitution of the Boards in 1891–92 will serve to show the nature and extent of the agency engaged in this branch of the administration.

| Province. | Class of Board. | Total number of Members. | By Qualification. | | By Employment. | | By Race. | |
|---|---|---|---|---|---|---|---|---|
| | | | Nominated. | Elected. | Officials. | Non-Officials. | Europeans, &c. | Natives. |
| Madras* | District | 654 | 377 | 277 | 226 | 428 | 118 | 536 |
| | Subdivisional | 1,141 | 1,141 | — | 317 | 824 | 65 | 1,076 |
| Bombay | District | 503 | 277 | 226 | 129 | 374 | 78 | 425 |
| | Subdivisional | 2,984 | 1,642 | 1,342 | 661 | 2,323 | 122 | 2,862 |
| Bengal | District | 790 | 481 | 309 | 253 | 537 | 197 | 593 |
| | Subdivisional | 1,248 | 779 | 469 | 154 | 1,094 | 105 | 1,143 |
| N. W. Provinces | District | 1,561 | 277 | 1,284 | 266 | 1,295 | 56 | 1,505 |
| Panjab | District | 1,335 | 863 | 472 | 245 | 1,090 | 89 | 1,246 |
| | Subdivisional | 1,584 | 595 | 989 | 89 | 1,495 | 11 | 1,573 |
| Central Provinces | District | 1,132 | 241 | 891 | 109 | 1,023 | 17 | 1,115 |
| Assam† | District | 371 | 224 | 147 | 61 | 310 | 130 | 241 |
| Berar | District | 128 | 32 | 96 | 16 | 112 | 5 | 123 |
| | Subdivisional | 306 | 105 | 201 | 24 | 282 | — | 306 |
| India | District | 6,474 | 2,772 | 3,702 | 1,305 | 5,169 | 690 | 5,784 |
| | Subdivisional | 7,263 | 4,262 | 3,001 | 1,245 | 6,018 | 303 | 6,960 |

* Excluding Unions. † Figures for 1890–91.

 The

LOCAL BOARDS.

The nominated and official element, it will be seen, is in rather higher proportion here than in the case of municipalities, as the areas dealt with are more extensive, and the interests to be weighed one against the other, more varied and scattered. As in many cases, owing to the connection of the fund with the land assesment, as well as for the above reasons, the officer in charge of the district or a subdivision is by virtue of his office the President of the Local Board; the European element is also more prominent than in the town corporations. Below is given a statement corresponding to that for municipalities, in which is shown the income and expenditure of the Local Boards of both descriptions for the last year of the decade. Comparison with earlier periods is scarcely worth while, as under recent changes the financial scope of the system has been enlarged. It is more to the point to pass under review the circumstances of the different Provinces into which the system has been introduced.

INCOME and EXPENDITURE of Local Boards in 1891–92.

| HEAD. | Madras. | Bombay. | Bengal. | North-West Provinces. | Panjab. | Central Provinces. | Assam. | TOTAL. |
|---|---|---|---|---|---|---|---|---|
| RECEIPTS: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1. Provincial Rates | 452,312 | 248,962 | 351,023 | 202,508 | 217,553 | 31,544 | 54,813 | 1,558,715 |
| 2. Cattle Pound fees | – | 16,497 | 47,219 | 16,792 | 5,244 | 17,039 | 5,345 | 108,136 |
| 3. School fees and contributions | 18,874 | 43,493 | 3,780 | 20,396 | 5,878 | 658 | 63 | 93,142 |
| 4. Tolls, &c. | 75,230 | 54,936 | 41,876 | – | 22,845 | 8,270 | 10,477 | 213,634 |
| 5. Miscellaneous | 94,170 | 5,158 | 20,345 | 24,096 | 24,744 | 6,691 | 519 | 175,723 |
| TOTAL REVENUE | 640,586 | 369,046 | 464,243 | 263,792 | 276,264 | 64,202 | 71,217 | 2,149,350 |
| 6. Provincial Contributions, &c. | 58,225 | 91,904 | 80,151 | 141,409 | 1,528 | 10,003 | 18,998 | 402,218 |
| 7. Loans, &c. | 20,956 | 920 | 76,938 | – | 71 | 7,283 | – | 106,168 |
| TOTAL RECEIPTS | 719,767 | 461,870 | 621,332 | 405,201 | 277,863 | 81,488 | 90,215 | 2,657,736 |
| EXPENDITURE: | | | | | | | | |
| 1. Administration | 42,830 | 13,360 | 28,290 | 5,225 | 11,952 | 2,755 | 259 | 104,671 |
| 2. Education | 105,619 | 139,640 | 110,537 | 125,564 | 57,178 | 20,545 | 16,169 | 575,252 |
| 3. Medical aid and sanitation | 160,067 | 18,872 | 7,632 | 48,116 | 30,596 | 5,015 | 4,679 | 274,977 |
| 4. Roads, buildings, water supply, &c. | 461,612 | 238,578 | 404,324 | 211,504 | 115,103 | 33,340 | 51,932 | 1,516,393 |
| 5. Minor and miscellaneous | – | 19,657 | 16,072 | 10,233 | 32,361 | 7,630 | 5,973 | 91,926 |
| TOTAL CURRENT EXPENDITURE | 770,128 | 430,107 | 566,855 | 400,642 | 247,190 | 69,285 | 79,012 | 2,563,219 |
| 6. Provincial Contributions, &c. | * | 17,569 | 513 | – | 44,921 | 3,165 | 325 | 66,493 |
| 7. Loans, &c. | 36,074 | 4,398 | 61,798 | – | 407 | 7,263 | – | 109,940 |
| TOTAL DISBURSEMENTS | 806,202 | 452,074 | 629,166 | 400,642 | 292,518 | 79,713 | 79,337 | 2,739,652 |
| BALANCE Opening | 217,374 | 289,976 | 167,149 | – | 123,532 | 42,782 | 14,425 | 855,238 |
| BALANCE Closing | 130,939 | 299,772 | 159,315 | 4,559 | 108,877 | 44,557 | 25,303 | 773,322 |

* Distributed under different heads.

Madras.

Beginning with the Madras Presidency, where Local Boards were first established in 1871, it appears that various levies were imposed under general or local Acts, dating from 1857 downwards, but in the year above mentioned they were first placed under organised district bodies. Circles were formed in each district, and to each was appointed a Board, consisting of the Collector as President, with a certain number of members, one-half of whom had to be non-officials—that is, not salaried officers of the State. All of these were nominated by the Local Government. By Act V. of 1884, passed by the local Council, a District Board is established, consisting of not less than 24 members, besides the President, who, unless under special notification, is the Collector by virtue of his office. The officers in charge of sub-divisions are also *ex officio* members. The proportion of officials is reduced to one-fourth, including those who sit by virtue of their office. The elective system can be introduced into such areas as may be designated by the

the Local Government, and where it is in force three-fourths of the members of the Board are to be appointed under it. Then, again, in each subdivision a Board is established on the lines of that constituted for the whole district; but instead of one-fourth being fixed as the maximum proportion of officials, it is rendered legal to appoint on it one-third, owing, in part, to the comparatively narrow field of choice in outlying tracts. Similarly, one-third is adopted as the maximum of appointed members where the elective system is in force. Passing over details, it may be mentioned that the funds for the administration of which the Boards are constituted, consist of a tax at one anna per rupee, or $6\frac{1}{4}$ per cent. of the annual rent value of all lands, except in the two west coast districts and the Nilgiri hills, where the rate is double. Secondly, a tax on houses within the union, and tolls on its roads, fees on markets, and so on. The mode of assessing the first two items is prescribed in the Act, and the circumstances are set forth in which contributions towards works of public utility or convenience can be demanded from corporations outside the jurisdiction of the Local Board, but who are benefited by the undertaking. In addition to the Boards, the Act allows of the establishment of Unions, with still smaller representative bodies in them, known by the vernacular title of Panchaiat, or juries, on which the headman of each village contained in them sits by virtue of his position and office. Here, too, the elective system can be introduced, where the Local Government thinks it will work well. Local Boards.

In 1891–92 there were elected members on all the District Boards except in Karnul and the Nilgiris. On the Subdivisional Boards and the Unions all are nominated or sit by virtue of their office. In reviewing the work of the year, the Local Government considers that three or four of the District Boards were conspicuous for their successful administration, and that the working, on the whole, was creditable to all three classes. The ordinary receipts suffered in some cases in the north of the Presidency from the bad season, which affected the land revenue, on which they depend. The incidence of the taxation under the Act was only 0·16 rupees. The deficiency in ordinary income was to some extent made up by larger contributions from provincial funds, so that the works in hand did not suffer. The taxes on land and houses brought in respectively 61 and 3 per cent. of the total receipts; tolls yielded 11 per cent.; and 7 per cent. had to be granted by the State. More than half the current receipts were spent on public works, chiefly roads and bridges, as such undertakings afforded a good supply of work for the labouring classes in the districts where the crops had partially failed for two years running. The mileage of road maintained was 20,300, or nearly 200 miles more than at the beginning of the year, and 227 miles were added to the former account. Village roads, however, received less attention than the Local Government is of opinion they deserve. The proportion of the receipts spent on instruction was 11·3 per cent., and the advance made during the year is viewed as decidedly encouraging. Under the head of water supply there was a considerable increase of expenditure, partly owing to the drought. No less than 700 wells were dug, and nearly 2,700 sources of water supply were repaired. Village sanitation progresses but slowly, though it received more attention than usual in all but a few districts during the year under review. Finally, the cost of establishment and supervision rose a little, owing to the pressure put upon the Boards in the tracts where special additions had to be made to the ordinary year's work, to meet the exigencies of the bad season amongst the agricultural population.

In the Western Presidency the establishment of Local Boards took place two years earlier than in the south of India. Act III. of 1869, passed by the Local Council, dealt with the subject on much the same lines as the Madras Act, with the important exception of adopting at once the separation of the two district bodies, which was not effected in the other Presidency till 1884. The District Board, under the presidency of the Collector, comprised representatives, nominated by the Government, of the local landholders, the owners of what are known as "alienated" villages, and an engineer, with the Educational Inspector of the Division for matters concerning his department. There was a similar Board, on a smaller scale for each revenue sub-division, but its functions were mainly directed to ascertaining Bombay.

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ascertaining local requirements and recommending selected works to the notice of the District Board, in which was vested most of the executive power and responsibility. By Act I. of 1884, of the Bombay Legislature, as in Madras, the elective system was adopted. The Subdivisional Board was altered in its relation to the District Board. It now consists of one-half elected members, and of the rest only one-fourth may be salaried officials of the State. The elected members are the representatives of groups of villages in the subdivision, of any municipal town containing more than 5,000 inhabitants, and of the holders of "alienated villages." On the District Board each subdivision is represented by one of the members of its own Board, selected by his colleagues. All towns of over 18,000 inhabitants are also entitled to representation on the same terms, as well as the alienees above mentioned. The term of office is in both cases three years. Generally speaking, the President of a Board is nominated by the Government, though the law admits of election if it be so ordained by the latter authority. If, however, the President be a salaried official, his Vice must be a non-official, or otherwise, elected by the members, subject to the confirmation of the Government. Provision is made for the attendance at the meetings of officials whose opinion as experts is required, such as medical men and engineers, though they be not members of the Board. As a rule, however, these professions are duly represented, either by election or nomination. The funds at the disposal of the Board comprise much the same items as have been already mentioned in connection with the Madras system, namely, the cess on land, and in Sindh, a shop tax; the proceeds of tolls and ferries, and sundry minor resources. In consideration of the bulk of the income being directly levied from land assessed to the State charge, the local cess is collected at the same time and by the same agency as the latter, so the Board is not empowered to modify the rate or to impose any fresh impost. It may be remarked here, that the funds known in the financial accounts of the Government of India as the "excluded" are not under consideration at present, as they are mostly under special administration for special purposes, not as the "included" funds, for the local development and improvement of the country at large. As regards the administration in this Presidency during 1891–92, it must be noted that three districts and a portion of two more are excluded from the operation of the Local Boards Act, owing to their present backward condition. Other Boards are increasing the number of their members in accordance with the growth of towns into municipalities. The Local Government notices that in most districts the attendance of non-official members at the periodical meetings was better than previously. In the matter of finance, the two main points to be noted are the increased expenditure on the water supply, amounting to nearly Rx. 9,700, and the occasionally excessive amount of the closing balance, in circumstances where the needs of the tract would amply justify its reduction to the minimum sanctioned by the Government. The accounts show a good deal of adjustment of items under different heads to those under which they appeared in former years, so that the comparison of the revenue is not of much value. On the whole, however, the administration seems to have been satisfactory. No special works are singled out for comment in local reviews.

Bengal.

Bengal was singularly free from local taxation until 1871, at which time nothing more than tolls on a few roads and ferries were levied. The receipts were used provincially, not locally, and there was nothing in the shape of local administration or responsibility. The result was that the taxation of this class in this populous part of India amounted to no more than about 0·04 rupees per head, whereas the corresponding incidence in Madras was 0·15 rupees; in the North-West Provinces, 0·17 rupees; in Bombay, 0·27 rupees, and in the Panjab, rose to 0·32 rupees. In justice to the rest of British India, therefore, a Road Cess Act was passed in 1871 by the Bengal Council, providing for the construction and maintenance of roads out of a cess raised locally on a special valuation of land, whether held for cultivation or other purposes, on mines, quarries, and on houses. District and Subdivisional Boards were established to prepare the estimates of their annual income, with a specification of the various works it was proposed to undertake out of these funds. Two-thirds of the members were

to

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to be non-officials, and provision was made for the introduction of the elective system when the Local Government thought the time had come for this innovation. A second cess was imposed in 1877, for the purpose of carrying out other works of public utility, with this difference in the enactment, that the proceeds of the latter cess were not made over to the District Boards, but paid into the Provincial Treasury. In 1880 both Acts were consolidated and amended. Houses, for instance, were exempted from the cess, but revenue-free holdings were made subject to it. Neither Acts were extended to the more backward districts, such as the hill tracts of Chittagong, Singhbhum, or the Santhal district. It should be noticed, too, that the powers of the Local Committees were limited to the care and extension of roads only, not, as in Madras and Bombay, to the lower grades of schools and medical institutions. The whole system, however, was brought more into line with that of the last-mentioned Provinces in 1885, when the Local Council passed Act III., to extend the system of local self-government in Bengal. Local Boards were established in subdivisions, unless specia reasons existed for withholding them, and the District Board, which is the administering authority where there are no local units, is entrusted in the other case with the general control of the latter. Where there are Union Committees established under the former Acts, they remain as agent for carrying out the duties laid upon them by the Local or Subdivisional Boards. The district officer is given special powers of control in cases where he is not the Chairman of the District Board. The elective system is introduced freely. First, the Union Committees, where they exist, delegate members to the Subdivisional Board. The Local Board, in turn, delegates a member, or more than one, to the District Board. Not more than a third of a Local Board may be salaried officials of the Government, and in the case of District Boards, the proportion is reduced to one-fourth. A certain degree of control over the finance and the work or proposals of the Boards is reserved to the Government, which is also empowered to extend the provisions of the Act to tracts where it was not in force on its becoming law. The sphere of administration was extended to primary and middle-class schools in the district, including the expenditure of funds assigned by the State for such institutions. A brief review of the working of the Act during the year 1891–92 will supply in a convenient form the place of further description.

The number of District Boards is 38, with 106 Local Boards. In all the former the district officer is the Chairman. The attendance at the periodical meetings of the District Boards amounted, on an average, to as much as half the total number of members in eleven cases only. In the case of the Subdivisional Boards the average was even lower, but whilst in several instances the excuse was the refusal of travelling expenses, there is reason to suppose, in the opinion of the Local Government, that the true cause for the general apathy in this matter is the small power delegated to this class of corporation, and the paucity of work with which the Boards have to deal. The classes represented on the two grades of Boards respectively are shown in the marginal statement. The high proportion of lawyers in both columns is the chief feature, and along with it, the low numerical rank of the agriculturist relatively to the proportion of that class in the general community. The powers of Local Boards differ greatly from district to district. Roads and cattle-pounds are their chief care in most cases, but in 17 they have also some share in the control of primary education, and in 12, in that of ferries. Secondary education is, in the eyes of the Local Government, not a fit subject for their supervision. The extent of the expenditure on education is not completely set forth in the returns, but apparently some 30 per cent. of the boys of school-going age are provided for, though in the case of the Bihar divisions the ratio falls to 13 per cent. On the whole, the Local Government testifies to the good results of the system of 1885, so far as District Boards are in question, since with the executive aid of the Collector

| Class. | Percentage on Total of Board. | |
|---|---|---|
| | District. | Subdivisional. |
| Salaried State Officials | 31·5 | 12·6 |
| Landholders and Agents | 23·9 | 47·7 |
| Pleaders and Law Agents | 22·6 | 23·8 |
| Planters | 8·3 | 4·1 |
| Pensioned State Officials | 1·9 | 1·5 |
| Others | 6·3 | 10·4 |

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lector and the small group of the experts appointed to each district, the advice of the other members, with their local experience, is a most useful adjunct. As to the smaller bodies, the Local Boards, there seems to be no doubt that some reform is advisable, and it is recommended that the first step should be the election of an official chairman, who would bring to the work both prestige and familiarity with public business, qualities said to be much wanting under the present system.

North-West Provinces.

In the North-West Provinces and Oudh, as in Madras and Bombay, the system of local administration through District Committees had been in force some time before the introduction of the elective system under the legislation of 1883. The main source of revenue placed at the disposal of the above Committees was a light cess on the land assessment or the annual rental, paid by the landlord, but recoverable to the extent of half from the tenant. As in other Provinces, the proceeds were spent entirely within the district yielding them. Legislation on the subject was undertaken in 1871 and 1878. The permanently settled tracts were subjected to the assessment in the same way as those under periodical revision. In 1882 a series of orders was issued by the Local Government developing the scheme or increasing the non-official element, and extending the powers of the local bodies. These were afterwards incorporated in Act XIV. of 1883, of the Council of the Governor General. The first election under this enactment was held in 1885. Under the former arrangement the District Committee was nominated by the Government, the only regulation being that one-half members should be non-official landholders or residents of the district. The Subdivision was not recognised as an administrative body until the new law placed the matter on a different basis. The Subdivisional Board is first elected, three-fourths being thus appointed and one-fourth nominated. The aggregate of the Subdivisional Boards form the District Board, except in a few instances where the smaller body delegates some of its members to represent it on the larger. The number of members is always a multiple of three, so that the Board holds office, as a whole, for that number of years, each member going out by rotation. The Subdivisional Body elects its own chairman, whilst the District Board is given the option of either electing, subject to the approval of the Local Government, or of leaving the appointment altogether to the latter. The powers and functions of the Boards are defined under the Act, whereas, under the former law, the latter were simply the residuaries of the Government and its local agents. The provisions of the new Act were not applied to the more backward tracts in the hills in the north and south of the Province. On the occasion of the first election, no less than 72 per cent. of the voters exercised their privilege, and in all cases the District Boards were left to the district officer's guidance as Chairman. In the year 1891–92, there were District Boards in all but four of these units in the Province, and the Collector was still chairman in all of them. In the remaining four districts, the old system of Committees still prevails. The Local Government notes a certain apathy about the annual elections, and is of opinion that so long as every member of the Local Board is a member of the District Board, the proportion attending meetings is not likely to be high. The subject that attracted the greatest interest is reported to be that of education, and the administration of the assignments of funds for public works is also stated to have been economical and efficient. On the other hand, the Local Government remarks that though individual members of a Board may take considerable interest in local affairs, the bulk of the work is done by the official members, that is, the district staff working under the guidance of their departmental heads, so that as a form of genuine self government, the system is here without vitality. This is much the same opinion as that reached by the Bengal authorities, though differently expressed. Amongst other work undertaken during the year, special mention is made of the provision of separate accommodation and attendance for women in medical institutions, for which funds were provided partly by private subscriptions, partly from provincial and local resources.

Panjab.

The development of Local Boards in the Panjab has been very much on the same lines as in the North-West Provinces and Oudh. The proceeds of the cess on land formed the bulk of the resources of these bodies between

1871 and 1883. Under an Act of the former year, District committees were established, with the Deputy Commissioner as President, and two-thirds of the members officials. In October 1883 the District Boards Act became law. Instead of a single committee for each district, sub-divisional boards were constituted in the 21 districts to which the provisions of the Act were extended, wherein the majority of the members were elected by the duly qualified rural voters. The Deputy Commissioner continued in the chair, as he was elected by the new boards in every case. In 12 districts, chiefly in the west, the system of election is not quite suitable to the local population, so nomination is still in force. The provisions of the new law differ only in detail from those described in connection with the North-West Province system. In 1891–92 the number of nominated members slightly increased, because in some cases the full tale allowed under the rules was appointed, and elsewhere, either no candidates appeared, or as in Delhi those who had been elected resigned in order to be nominated by the Government. In the 14 districts in which elections were held the results were by no means encouraging to those who anticipated a gradually increasing interest in the contests. In some places no votes were given at all, in others it was openly avowed that no opposition would be offered to former members who presented themselves for re-election. At the same time, the working of the District Board system is favourably regarded by the Government, and the attendance at the meetings improved. The difficulty is found in getting work out of the smaller boards, and here the Frontier Province is for once in accord with the Ganges Delta. The details of income and expenditure call for no remark, except that the attention of the boards has been strongly directed to the necessity of completing a good system of roads to act as feeders to the chief railway stations. Local Boards.

Local Boards in the Central Provinces date only from 1883, when they were created by Act I. of that year. Certain cesses had been levied previously, in the same way as in the North-West Provinces, for the maintenance of roads and schools, but the funds so obtained were administered entirely by the State officials. By the Act just mentioned, Local Boards were established for groups of circles, with a District Board for the whole collection. On the former sit representatives of the Headmen of the villages of the circle and of the professional or mercantile classes therein resident, with a number that may amount to one-third, appointed by the local Administration. The Local Board elects a member or so of its own number for each group of circles under it, to serve as its representative on the District Board. On the latter sit, also, representatives of the professional and mercantile classes, elected by or appointed on behalf of those bodies, and a certain number of persons appointed by the Chief Commissioner, as on the Local Board. Both bodies elect their own Chairman. Provision is made for the control of the district authorities, as in Bengal and elsewhere, and in a general way, the Act is framed on much the same basis as in the other Provinces that have already been under review. In the year 1891–92 the average attendance at the meetings of both classes of Boards was only just over 40 per cent., as in the year before. It was better in the case of the District Councils than in that of the smaller bodies, and the local authorities seem to attribute the failing in the latter to the same cause as has been mentioned in connection with Bengal, namely, the over centralisation of the work. The danger in the Central Provinces is said to be that of the whole administration falling into the hands of the professional men of the towns, who are out of all touch with village wants and experience. A good deal of the road repair of the province was effected through the Local Boards, and since the close of the year in question village sanitation has been made the subject of special regulation, so that every season an assignment from the District Fund will be available for improvements in this direction. In the same way, primary education has been brought more closely within the sphere of local management, and it is proposed to extend the system of grants in aid of private village schools, to supply the want of sufficient institutions of this class. The system of District and Local Boards is believed to be adaptable to the circumstances of the large Zamindari estates under these Provinces, so the proposals to extend Central Provinces.

Local Boards. extend to them the provisions of the Act of 1883 has now been reduced to a practical shape, and, in order to let these tracts start their boards with a fair supply of funds, the cost of some establishments connected with the postal, vaccination, and educational services, which used to be levied from them, has been remitted.

Assam. Assam enjoys a considerable amount of Local Government through District Boards constituted under a regulation of 1879, as modified by local Circular Orders in 1882. The constitution of the Boards is, in a general way, much the same as that in the other Provinces in which legislation on the subject has been undertaken since 1882. The sub-divisional Boards now exercise more authority than as originally framed, and the elective system in some form or other, prevails throughout the valleys, tempered as elsewhere, with official nomination. In the tea districts; the European planters have the privilege of electing their representative on the Board, whilst the other members are either elected by the native ratepayers or nominated from amongst them, according to the character of the district. In the hill tracts, where a very primitive form of government exists, boards are not established. The working varies much from district to district, but, on the whole, much improvement in the water supply has resulted from the action of the local bodies, but sanitation receives too little attention. In the tea districts, the European members are reported to exercise an efficient supervision over the road works in their neighbourhood.

Berar. The local revenue of Berar has not been brought on to the general returns, as it forms a part of a special account, administered under the general control of the Resident at Haidrabad. The same system as to boards and finance, however, is in force as in other provinces. Two-thirds of the members are elected, but for 69 vacancies at the last elections, though there were 279 candidates, only 18½ per cent. of the qualified voters registered their vote. On the Boards, as a whole, there are 128 members, of whom 16 were officials, and 123 natives. In Burma the cesses levied for local purposes are not on the same footing as in India proper, and are administered by the State.

## PORT AND HARBOUR TRUSTS.

The last class of Corporations with which this chapter has to deal is that to which is entrusted the administration of the affairs and property of the chief sea ports, the duties in connection with which are growing every year in extent and importance. These bodies, like those that have been considered in the preceding pages, are constituted in part on an elective basis, and in all cases contain representatives of the technical and commercial interests most concerned in the welfare and advancement of the objects of the Trust. Engineers, for example, sit on the Boards, with delegates from the Chambers of Commerce and the chief local Trades' Associations, and the officials in charge of the State revenue affairs of the city or the district in which it is situated, as the case may be, as well as a representative, generally the President or Chairman, of the Municipal Corporation. The Property invested in the Port Trusts is extensive and valuable, and their powers and responsibilities correspond to it. The establishment of new docks, and the maintenance in efficient order of those in existence, of landing-places, jetties, foreshore properties, wharves, lighthouses, buoys, channels of approach, and so on, form the chief part but not all, of the work before the Boards. To enable them to carry out the expensive undertakings necessary for the convenience and development of trade in the chief ports of India, large powers of borrowing have to be vested in them, and in most cases where the credit of the Corporation has been submitted to the touchstone of the public market the results afford satisfactory testimony to the estimation formed by the public of the administration of the resources with which the Boards have to deal.

Calcutta. The Calcutta Trust was formed in 1870, but the law under which it works was amended and consolidated into its present shape in 1890. The normal composition of this body is 15 members, of whom eight are elected, one by the Calcutta Municipality, one by the Trades' Association,

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tion, one by the Bengal National Chamber of Commerce, and the rest by the Bengal Chamber of Commerce, undistinguished by that adjective. At the present time, two are natives of India, and the rest, as might be expected from the direction of the foreign trade, Europeans. In addition to the above fifteen members, two, the Chairman and Vice-Chairman, are appointed by the local Government. Much of the work is done by Standing Committees, of which there were in 1891–92, six. The current income and expenditure of the year just mentioned and that which concluded the previous decade show the development of the Trust in this respect, but the loan transactions are more important. In the following table are shown the main heads of the former :—

| Head. | Revenue. | | Expenditure. | |
|---|---|---|---|---|
| | 1881–82. | 1891–92. | 1881–82. | 1891–92. |
| | Rx. | Rx. | Rx. | Rx. |
| Jetties | 76,805 | 126,695 | 54,786 | 76,035 |
| Wharves for inland vessels | 38,194 | 50,021 | 22,393 | 33,974 |
| Strand lands, &c. | 15,747 | 17,423 | 11,156 | 8,192 |
| Port | 48,187 | 52,035 | 46,147 | 47,240 |
| Tramways | 13,581 | 29,157 | 9,767 | 19,029 |
| Port approaches | 17,156 | 46,930 | 14,776 | 45,271 |
| Total Rx. | 209,670 | 322,261 | 159,025 | 229,741 |

As regards the Capital Account, the marginal note indicates the general position at the beginning and end of the period under review, excluding from the accounts in the later year the advances received from the State towards the loan for the new wet docks, amounting to Rx. 2,562,522. During the year 1891–92 the debt was reduced by Rx. 14,159; the current revenue, as shown in the table just given, is increasing, and the assets held by the Trust, exclusive of the foreshore received from the State free of charge in 1870, bear a relation of Rx. 194 per 100 of debt, whereas in 1891–92 the corresponding ratio was but Rx. 169.

| | Rx. |
|---|---|
| Debt owing at beginning of 1881 | 701,856 |
| Addition during year (net) | 89,927 |
| Debt at end of March 1882 | 791,783 |
| Debt owing at beginning of 1891 | 1,190,097 |
| Reduction during year | 14,159 |
| Debt at end of March 1892 | 1,175,938 |
| Dock works, advances to end of March 1892 | 2,562,522 |
| Assets, 31st March, 1882 | 1,343,361 |
| " " " 1892 | 2,281,714 |

The principal works of the decade were those in connection with the wet docks at Kidderpore, a few miles down the Hughli. These were planned in 1883–84; but, from the numerous causes that tend to retard the beginning of large enterprises of this sort, work was not carried beyond the acquisition and clearing of land till 1885. It was pushed on till 1890 by advances from the State out of a loan raised for the purpose, and would have been opened for use early in the next year had it not been for the bulging of the walls in one or two places, an accident which necessitated the exclusion of water for some months, whilst the repairs recommended by a Committee specially appointed by the Government were being executed. On the 10th of July 1891 the first vessel was admitted to the graving dock, and since that time, up to the end of March 1892, seven private and six State vessels have been overhauled and repaired there. In connection with the shipping of the port it may be noted that though the numbers entering and clearing have fallen during the decade from 2,292 to 2,204, the tonnage has increased

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increased from an average of 1,729 per vessel to one of 2,412. But this is a subject that will be discussed in more detail in another chapter.

Bombay.

The Bombay Port Trust was constituted under an Act of the local legislature, in 1873. The property vested in the Trust consisted of the Mody Bay reclamation, which belonged to the State, the Elphinstone Company's estate, which had been purchased by the Local Government in 1870, and sundry basins and landing-places along the foreshore. The Trust thus started with a debt of Rx. 2,117,075. It was managed by 12 trustees and a Chairman, all nominated by Government, and absorbed the former Harbour and Pilotage Board, with its fees and other revenue, and accompanying duties. For some years the Trust suffered from the competition of private rights in the foreshore, and, except during the temporary increase of the grain trade during the famine of 1877–78, could not secure sufficient income to meet their liabilities. In 1879, therefore, the Local Government purchased the private properties aforesaid, on behalf of the Trust, at the cost of Rx. 714,500, and re-constituted the Board of Administration under a revising Act VI. of 1879. Five of the Trustees were henceforth to be elected by the Chamber of Commerce, whilst the Chairman and five members were still nominated by the Local Government. It was also enjoined that three of the members should be natives of India resident in Bombay city. The powers of the Trust with regard to land in their occupation were enlarged, and the control of the State over the administration defined.

The chief works undertaken by the Trust have been the two wet docks, known as the Prince's and the Victoria. The former was begun in 1875, on the occasion of the visit of H.R.H. the Prince of Wales to the city, whilst he was on tour in India. It was completed on the 1st of January 1880, and since it has been open the financial difficulties of the Trust appear to have ceased, and the annual deficit has been usually replaced by a surplus. The water area of the dock is 30 acres. It has two entrances, and 6,950 feet of quay. The total cost under all heads up to March 1892, was some Rx. 872,700. Before three years had passed from the admission of vessels to the above, it was found that the expansion of the shipping trade of the port required the extension of dock accommodation, so a committee of the Trust investigated the question, and proposed that a new dock should be undertaken with accommodation for about 20 vessels. Preliminary work in connection with the preparation of the site was started within the year, as soon as the survey and plans had been sanctioned by the Government. A tender of Rx. 437,535 was accepted in the course of the next year, and a year after, the funds required were provided by the State, being advanced from a public loan, in the same way as the Calcutta docks have been financed. On the 12th of March 1888, or a season in advance of the contract period, the first vessel entered the new basin, which received the name of the Victoria Dock, in commemoration of Her Majesty's Jubilee. Up to the end of the financial year 1891–92, the sum spent on this dock had reached Rx. 857,426. The relief thus afforded to the port trade may be appreciated from the fact that in the first year of its operation, the new dock received 282 vessels, against 295 that entered the sister basin. The number rose to 374 in the season after, and 401 in 1891–92. A new dry dock was opened in 1891, after only two years spent in the construction. The Mody Bay estate was drained during the decade, and the landing-place there for coasting craft completed, in addition to other works, such as the reclamation of the useless basin at the Apollo Bandar, and the erection of warehouses and stores handy to the various landing-places. The grain market, too, on the Trust has been commercially successful, in addition to its convenience to the public. The growth of the foreign shipping traffic in Bombay during the 10 years has been remarkable, if we include the native craft, rather in respect to bulk than to the number of vessels engaged. The latter is practically the same in both years, the former shows an increase of 27 per cent.

As to the financial position of the Trust, it appears that the ratio of assets to liabilities is much the same as ten years ago, that is, it is now 106 to 100, whereas it was on the former occasion 103. The capital debt stood at Rx. 4,937,003 at the beginning of the year, and at Rx. 4,931,768 at the end, with a revenue reserve of Rx. 155,740. The current accounts for the years

1882–83

1882–83 and 1891–92, which are compared in the following table, indicate the increased work done by the Trust for its increased income :— PORT AND HARBOUR TRUSTS.

| Head. | Revenue. | | Head. | Expenditure. | |
|---|---|---|---|---|---|
| | 1882–83. | 1891–92. | | 1882–83. | 1891–92. |
| | Rx. | Rx. | | Rx. | Rx. |
| Wharfage fees, &c. - - | 216,861 | 190,122 | Shore property - - - | 37,153 | 41,647 |
| Docks - - - - | 102,614 | 244,854 | Docks - - - - | 58,070 | 126,533 |
| Port - - - - - | 26,966 | 15,525 | Port - - - - - | 15,972 | 19,922 |
| Pilotage - - - - | 17,480 | 17,804 | Pilotage - - - - | 17,480 | 17,804 |
| Others - - - - | 2,159 | 12,726 | Rents - - - - | 13,492 | 14,200 |
| | | | Interest - - - - | 154,444 | 211,999 |
| | | | Others - - - - | 13,248 | 30,291 |
| Total - - Rx. | 366,080 | 481,031 | Total - - Rx. | 309,859 | 462,396 |

The revenue of 1891–92 was higher than had been previously realised since the formation of the Trust, and the Revenue Reserve Fund was raised accordingly to Rx. 155,740. Low freights in Europe sent a good many more steamers to Bombay than in the year before, and the demand for Indian wheat in Europe, again, stimulated the popularity of this port. About 62 per cent. of the larger vessels visiting the harbour availed themselves of the dock accommodation, and, for the first time, the dock sidings that have been in existence since the Prince's Dock was opened came into use for rail-borne produce. Amongst other topics, it is worth notice that the bye-laws of the Trust prescribe precautionary measures that have to be strictly observed by the men working under them, who are mostly ignorant labourers. The result of the supervision is that preventible accidents are rare, and only 12 fatal casualties occurred in the year, of which three were set down to "heart disease and natural causes." New administrative offices were completed, with quarters for the permanent establishment, and several minor improvements effected.

The port of Karachi was put under a Board in 1880, as a sequel to the local Act III. of 1879, which authorised the levy of certain landing and wharfage fees. The President was to be the Collector of the district, with five nominated members. The port and pilotage funds, raised under an Act of 1875, and the wharfage fund above mentioned, but levied under an amending Act of 1882, constituted the current resources of the Board, with a contribution from the State, and the proceeds of a loan sanctioned for the construction of what is now known as the Merewether Pier, in commemoration of a late Commissioner in Sindh. The importance of Karachi has been much raised of late years by the completion of the Sakkar Bridge, which places the port in direct and unbroken communication with the great wheat-growing tracts of north-western India, of which it is now the main outlet. The extension of the wharf and landing accommodation was soon a matter of necessity, and the continuous dredging that is necessary to keep the channels and approaches clear for large vessels, as well as the inadequacy of the jetty-room for coasting craft, led to a special investigation of the circumstances by the Government of Bombay, with the result that it was decided that fresh works should be undertaken, and that the Harbour Board should give place to a Port Trust, established on the basis of that of Rangoon. The latter portion of the scheme was carried into effect under the local Act VI. of 1886, and the new Board took office from the beginning of the financial year 1887–88. Of the nine members, three and the chairman and his vice are appointed by the Government; two are elected by the local Chamber of Commerce, and two elected by the Karachi Municipality. The improvement of the hard of the native jetty, the deepening and maintenance of the approaches, the construction of a new wharf and railway sidings, have been the chief works of the last five years. KARACHI.

PORT AND HARBOUR TRUSTS.

The capital debt of the Trust amounted, on the last day of March 1892, to Rx. 246,764. Sanction for a loan of Rx. 200,000, to be raised in the open market, has been given, and the amount is to be spent on the extension of the existing wharf, to allow of four more full-sized berths, and on the provision of an import yard, with warehouses, sheds, sidings, &c. The following table relating to the last five years shows the expanding nature of the sphere of action under the trustees. In 1882–83, it may be mentioned, the income was Rx. 37,375, and the disbursements Rx. 35,046.

| HEAD. | 1887–88. | 1888–89. | 1889–90. | 1890–91. | 1891–92. |
|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. |
| General Revenue | 46,370 | 57,709 | 72,178 | 74,307 | 95,696 |
| Current Expenditure | 29,325 | 36,482 | 45,806 | 47,621 | 51,398 |
| SURPLUS | 17,045 | 21,227 | 26,372 | 26,686 | 44,298 |

| | *No.* | *Tons.* | *No.* | *Tons.* | *No.* | *Tons.* | *No.* | *Tons.* | *No.* | *Tons.* |
|---|---|---|---|---|---|---|---|---|---|---|
| Steamers | 282 | 311,587 | 324 | 381,403 | 368 | 463,934 | 407 | 512,716 | 479 | 616,957 |
| Sailing vessels | 15 | 6,739 | 8 | 1,793 | 1 | 191 | 2 | 774 | 10 | 3,990 |
| Country craft | 4,233 | 159,327 | 4,139 | 156,745 | 4,011 | 136,969 | 4,095 | 128,004 | 4,385 | 128,842 |
| TOTAL | 4,530 | 479,653 | 4,466 | 539,941 | 4,380 | 601,094 | 4,504 | 641,494 | 4,874 | 749,789 |
| Average steamer tonnage | – | 1,105 | – | 1,177 | – | 1,261 | – | 1,276 | – | 1,293 |

As regards the shipping, the two main points worth notice are the increase in number and weight of the steamers and the decrease in the former of the native craft.

Aden.

The Port Fund at the settlement of Aden was administered by the Resident up to 1889, but since the beginning of April in that year a Port Trust has been in power. The Act constituting it was first drafted in 1886, in consideration of the growing importance of the trade there, especially as a port of transhipment and communication, in connection with the trade of the Red Sea and East Africa. Some of the provisions of the original Act were not sanctioned by the Governor General, so modifications were made to suit the military character of the settlement and its other peculiarities. As the Trust now stands, the Chairman is the first Assistant to the Resident, and the members are all nominated by the Government. The finances of the Trust are shown in the marginal statement. On an average, between 1,600 and 1,700 vessels, exclusive of country craft, visit Aden annually, and some 900 touch the island of Perim. The main current expenditure at the former, as at Karachi, is on account of dredging.

| Year. | Income.* | Expenditure. |
|---|---|---|
| | Rx. | Rx. |
| 1888–89 | 18,660 | 11,894 |
| 1889–90 | 19,772 | 27,599 |
| 1890–91 | 20,166 | 40,055 |
| 1891–92 | 19,277 | 25,635 |

* Excluding balance.

The opening balance in 1889 was Rx. 48,081, and at the close of 1891–92 it was Rx. 14,007, the reduction being due to the heavy charges on account of dredging.

Rangoon.

The Rangoon harbour was placed under a Commission in 1880. As far back as 1876 the inconvenience caused to the greatly increased trade with foreign countries, as well as to that by steamer and country boat on the Irawadi, by the want of organised management of the natural facilities of the foreshore, had received the attention of the local authorities, and in 1879 the Council of the Governor General passed the Act XV. of that year, appointing the Port Commission. The nominations to this Board are to be made by the local Chief Commissioner, and not less than one-third or more than half are to be salaried officials of Government. The Chairman and Vice-chairman are nominated by the Chief Commissioner, like the rest. The term of office is two years. The details regarding the property vested in the Commission and the use they are to make of it, with the regulation of the fees and other charges they are empowered to levy, are all on the same lines, on the whole, as in other Acts of this sort passed in connection with Indian ports. The Act of 1879 was amended in 1892, as has been noted in the preceding chapter, in respect to the connection allowed between members of the Commission and the contracts of that Corporation. It may be

be mentioned that the approaches to the port and lighthouses in the neighbourhood are still under the superintendence of the local authorities. PORT AND HARBOUR TRUSTS.

The property made over in 1880 was not burdened by any debt, so the Commission started with a balance of Rx. 23,280. Their work began with the construction of several new jetties and the improvement of the landing-places used in connection with the traffic by country boat. Much was done in the same direction out of ordinary revenue for the first seven years of the Board's existence, but in 1887 they successfully floated a loan of Rx. 89,400 that had been sanctioned in the previous year by the Government of India, and took in hand more extensive and costly works, such as floating stages or pontoon jetties for use in connection with large vessels, and new wharves, and swinging moorings, with minor undertakings. In the first 10 years of the Commission's existence the value of the trade had increased by over 48 per cent., and the tonnage by over 70. In addition to the works noted above, the Board has provided tramways and sidings along its wharves, and new buoys and lights for the approaches. The following statement shows the receipts and expenditure of the Board during the two years that bound the decade under review :—

| Head. | Receipts. | | Head. | Disbursements. | |
|---|---|---|---|---|---|
| | 1881–82. | 1891–92. | | 1881–82. | 1891–92. |
| | Rx. | Rx. | | Rx. | Rx. |
| Port | 11,314 | 12,808 | General Administration | 4,558 | 3,348 |
| Pilotage | 13,894 | 20,256 | Pilotage | 13,448 | 18,793 |
| | | | Wharves, &c. | 8,735 | 17,505 |
| Wharves | 6,489 | 7,543 | Buoys | 1,265 | 9,898 |
| | | | River Police | 959 | 2,617 |
| Docks, &c. | 23,717 | 49,550 | Works and Repairs | 19,356 | 35,888 |
| Others | 11,152 | 20,463 | Others | 17,763 | 26,885 |
| Total Current | 66,566 | 110,620 | Total Current | 66,084 | 114,934 |
| Debt | 7,456 | 15,660 | Debt | 5,947 | 11,628 |
| Grand Total | 74,022 | 126,280 | Grand Total | 72,031 | 126,562 |

The amount of debt outstanding at the end of 1891–92 was Rx. 79,404. The number of seagoing vessels entering the port was 931 in the first of the two years quoted above, and 1,284 in the last, and the tonnage has doubled since 1880–81, when the Board began its work. The average tonnage per steamer, again, counting only the vessels engaged in the European trade by the Suez Canal, rose from 2,122 to 2,716.

The Madras Harbour Trust was established under Act II. of 1886, passed by the Local Council. Previous to this time the dues levied under Act VI. of 1882, which was brought into operation in 1884, were collected and administered by the State, through a Standing Committee and the Port Department. Of the former, three were members of the Local Chamber of Commerce and two of the Trades Association. Under the new Act the Trustees were, at first, eight nominated by the Government, of whom five were non-officials, and one was elected by the Trades Association aforesaid, since the Chamber of Commerce declined to delegate members, as it was not satisfied with the proportions allotted to the different sections of the community. Next year the other Association was in default, apparently for the same reason. In 1889 the full number of ten was obtained, four elected, and two officials with four others nominated. The general objects in view when the Trust was appointed were to facilitate the landing and shipment of cargo, and to economise the resources available for the purpose, whilst simplifying and reducing, as far as possible, the charges leviable. The first requirement was smooth water whilst the vessels are being laden or unladen ; the next, the improvement of the foreshore by bringing the railway into direct Madras.

PORT AND HARBOUR TRUSTS.

communication with the local tramways. The main undertaking for many years has been the enclosure of a considerable space of smooth water by two long piers. In no other way is it reported to be possible to counteract the effects of the heavy seas that prevail for most of the year on that coast.* The harbour works were placed under special agency as far back as 1876, and fair progress had been made, when a cyclonic storm, in November 1881, swept away the work of months and even years in the course of a few hours. Work was immediately recommenced, but on the formation of the new Board it was considered inadvisable to charge it with the cost of the repairs necessitated by the above misfortune, so the liabilities of the Trust began with the expenditure incurred since the end of March 1883. This amounted, in 1886, to Rx. 140,616. The privilege of borrowing conferred under the Act was exercised by the Trustees in the three following years, to the extent of Rx. 176,106. The original estimate of the harbour works was Rx. 570,000, but up to the end of 1891-92 there had been expended on it no less than Rx. 1,164,737, the revised estimate being Rx. 1,238,339. There has been a good deal of discussion regarding the point of the compass which the entrance ought to face in order to admit the least possible disturbance inside the arms of the protecting piers. After several Committees had considered the question in England, as well as in Madras, it was decided to adhere to the eastern entrance, in preference to that more to the north. Some damage was done by a second cyclone in 1887, but not to be compared in extent to that suffered in 1881. Nevertheless, it tended to retard the progress of the work. In 1891–92 the receipts fell to Rx. 57,400, owing to shorter grants by the State from the Port Fund. The harbour dues, however, which form the chief income, showed an increase of Rx. 4,363. The expenditure of Rx. 48,854 included a large refund to the Government. The tonnage, it may be mentioned, has doubled during the last ten years at this port, and the weight of merchandise landed or shipped at the pier and beach has been steadily increasing.

Chittagong.

For the Bengal port of Chittagong a Trust was established in 1888, but its work did not begin till a year later. Previously the port funds were administered under the supervision of the district officer, as in Karachi. The Board started life with a balance to its credit of Rx. 6,796. Its receipts are, as a rule, somewhat less than that sum. During the year 1891–92 the opening balance of Rx. 11,493 was reduced to Rx. 9,726, as the revenue was but Rx. 5,915, and the expenses amounted to Rx. 7,682, chiefly on clearing the harbour and buying plant. The trade is very largely with other ports in the Presidency, but from 40 to 50 vessels enter from foreign countries annually, and the opening of a railway between this port and Eastern Assam is expected to attract a considerable addition to this branch of traffic. The port lies 10 miles up the river, but the latter has no bar to obstruct navigation, though shoals higher up give trouble in this respect.

Abstract of Trade at the chief ports.

In estimating the relative importance of the chief ports too much weight is not to be assigned to the returns of the trade of one or two years, but the following table will serve to show the general position of each. The subject is one which is more appropriate, however, to the chapter on trade :—

| PORT. | Merchandise and Treasure. | | | | Shipping entering with Cargo. | |
|---|---|---|---|---|---|---|
| | Imports. | | Exports. | | | |
| | 1881–82. | 1891–92. | 1881–82. | 1891–92. | 1881–82. | 1891–92. |
| | Rx. | Rx. | Rx. | Rx. | Tons. | Tons. |
| Calcutta - - - - | 25,739,633 | 32,478,381 | 38,894,877 | 47,624,562 | 1,088,591 | 1,572,481 |
| Bombay - - - - | 37,053,018 | 46,791,838 | 39,293,123 | 51,889,287 | 1,949,852 | 2,435,115 |
| Madras - - - - | 4,453,784 | 7,060,162 | 4,180,895 | 4,635,772 | 594,099 | 1,199,782 |
| Rangoon - - - - | 5,669,633 | 10,135,828 | 5,658,329 | 9,041,989 | 466,713 | 905,209 |
| Karachi - - - - | 3,267,560 | 6,965,710 | 3,023,368 | 8,644,459 | 260,489 | 497,736 |

* It was proposed in 1868 to protect the roads by a long breakwater, but in 1873 the closed harbour was substituted, to be formed by two piers, 1,000 yards apart, and 1,200 yards long, enclosing an area of some 250 acres.

## LOANS TO LOCAL CORPORATIONS.

Loans to Local Corporations.

This chapter may conclude with a few lines on the subject of the financial aid given from time to time by the State to Municipalities, Local Boards, and Port and Harbour Trusts, a matter that has received considerable attention during the last few years. Previous to 1876 such loans were made with some freedom to Municipalities and the other Corporations named above for works of proved utility and convenience to the public. In that year, however, the sudden fall in the gold value of silver necessitated the imposition of restrictions on such transactions, and the accommodation was granted only in cases of emergency, the Corporation being left in other circumstances to make its own terms in the open market, under due supervision on the part of the State.

The rule was relaxed in 1879, to some extent, in favour of small loans by Local Governments to the rural Municipalities, as it was found that without some such concession it would be impracticable to carry out sanitary improvements and reforms. But the same objection to the stoppage of State loans applied, it appeared, to larger transactions, as it was found after a year's experience that loans could not be got in the open market save at very high rates of interest. It was proposed, therefore, to enlist more directly the interests of the Local Governments in the administration of such advances as might be made in the above cases on the credit of the Imperial Government. Under the former system loans were made only on the advice of the former, and through its agency, but, though irrecoverable sums were charged against Provincial resources, the interest due was credited as an Imperial asset, so that the local authorities had not the same inducement to look after its punctual realisation. It was arranged, therefore, after consulting those concerned, that the difference between the rate of interest on these loans and that at which a public loan can be obtained, which is always in favour of the latter, should be surrendered to the Local Governments, on the condition of their undertaking the whole responsibility for the administration of this branch of finance. The new departure did not apply to the Presidency Corporations, as they possess, as we have seen above, a good public credit of their own, but in the case of other Municipalities loans can now be granted on strict adherence to the three conditions; first, that the works for which the loan is granted are those in which the State has a general, as distinguished from local, interest such as drainage and water works, not roads, bridges, buildings, and the like. Secondly, that the loan is to be repaid within 20 years, except under sanction in special cases, and, lastly, that a Local Body having borrowed from the State, is not to borrow from any other source till it has satisfied the Local Government concerned that the sum lent as above, with interest thereon, is duly secured. The loans under special provisions of the law, such as those to agriculturists for the improvement of their land or the purchase of cattle, for embankments and boundary marks, and the like, or to special classes of encumbered estates, are included in the scheme, though with regard to them there was no change of policy involved in the new rules. As to the transactions with Local Boards, District or otherwise, the case is different, since, in their financial aspect, these Bodies, as has been indicated in the description given above in an earlier portion of this chapter, represent no more than an administrative arrangement of the State for the management of such items of public expenditure as the Local Government makes over to them, whether by law or executive order. As, however, the accounts of these Boards are now separated fairly completely from the general State accounts, the objection to granting loans on the same terms as to Municipal Bodies, has practically ceased, and the two are almost on the same footing.

LOANS TO LOCAL CORPORATIONS.

The following statement, with which this chapter will close, summarises the above loan transactions up to the end of the period dealt with in this review :—

| PROVINCE, &c. | Sanctioned Amount of the Loan. | Owing on 31st March 1892: | | Transactions during 1891–92. | |
|---|---|---|---|---|---|
| | | To the State. | To the Public. | Borrowed. | Repaid. |
| | *Rx.* | *Rx.* | *Rx.* | *Rx.* | *Rx.* |
| Madras | 943,636 | 663,866 | 160,200 | 86,350 | 13,341 |
| Bombay | 10,712,026 | 4,638,952 | 4,356,306 | 384,780 | 71,636 |
| Bengal | 7,334,779 | 3,772,596 | 2,389,168 | 645,727 | 50,912 |
| North-West Provinces | 464,572 | 408,620 | 14,710 | 171,165 | 31,802 |
| Panjab | 403,500 | 306,735 | 26,000 | 42,738 | 9,679 |
| Central Provinces | 111,500 | 48,893 | 41,900 | 20,500 | 2,737 |
| Assam | 1,700 | 1,053 | 180 | — | 65 |
| Burma | 580,704 | 39,170 | 428,654 | 4,500 | 35,336 |
| Smaller Provinces | 67,047 | 48,904 | — | 12,992 | 1,729 |
| GRAND TOTAL *Rx.* | 20,619,464 | 9,928,789 | 7,417,118 | 1,368,752 | 217,237 |
| Abstract. Presidency Municipalities | 7,674,923 | 1,417,564 | 4,746,420 | 565,400 | 57,870 |
| Port Trusts | 10,824,168 | 7,495,892 | 2,034,472 | 501,375 | 61,954 |
| Other Corporations | 2,120,373 | 1,015,333 | 636,226 | 301,977 | 97,413 |

# CHAPTER VI.

## LITIGATION AND CRIME.

Litigation and Crime

In the last decennial number of this review a full account was given of the development, under British rule, of the system of administering justice in India, from the rudimentary and centralised form in which it was handed over at the time of the acquisition of the different parts of the country, to the widely diffused and highly specialised organisation that prevails at the present time. It is not proposed to reproduce the historical portion of that account on the present occasion, but merely to bring it up to date, prefacing the summary of the changes of the last 10 years with a brief explanatory sketch of the general distribution of jurisdiction and control.

### Courts of Justice.

The High Courts.

The High Courts, established by letters patent, exercise their ordinary original jurisdiction only within the limits of the Presidency towns, but through their extraordinary original and their appellate jurisdiction their control is complete over all other courts of justice, whether civil or criminal, within the limits defined in their patent. To the three earlier High Courts of the Presidency towns, that at Allahabad for the North-west Provinces was added in 1866. In the Panjab, the same class of functions, though in a somewhat restricted form, are performed by a Chief Court, which owes its origin to an Act of the Indian Legislature, and is of the same age as the Allahabad court. In addition to the civil and criminal work which alone forms the subject of the present chapter, these courts exercise jurisdiction in matters of insolvency, in testamentary cases and intestacy, and in admiralty and matrimonial suits. The High Courts are composed of a Chief Justice, usually a distinguished member of the English Bar, of a certain number of puisne judges, some being barristers, others members of the Civil Service; and appointments have been made, too, of advocates of the court, not being members of the Bar. In 1892 the strength of these courts, including the four Chief Justices and the Chief Judge, was 32, out of whom six were natives of India. The only matters relating specially to their functions during the decade that call for mention at present are first, the investment with the powers of a Colonial Court of Admiralty of the chief judicial authority at the seaport towns of Karachi, Rangoon, and Aden, thus removing territorial limitations, and extending the powers of the Admiralty jurisdiction already vested in the High Courts. Secondly, in Madras city, the establishment of an additional civil court, with jurisdiction in suits and other proceedings of a civil nature not exceeding Rx. 250 in value, relieves the local High Court of a considerable amount of petty original work. Then, again, in the North-West Provinces, the High Court has been appointed the referee in cases from Oudh, to which its jurisdiction does not extend under the letters patent, when there is a difference of opinion between the two local Judicial Commissioners. In the Panjab some steps were taken by the Legislature to accelerate the disposal of work in the Chief Court, by increasing the powers of judges when sitting singly, and by restricting the power of appeal to the limits observed in other parts of India.

Judicial Commissioners, &c.

Except in the case of Assam, which is under the Calcutta High Court, in the tracts known as non-regulation, the highest judicial office is that of Judicial Commissioner. In Rangoon, however, the Recorder has local jurisdiction approaching that of a High Court, and has jurisdiction, also, over European British subjects in all parts of the Province, Upper and Lower. The appointment of a Judicial Commissioner to the former division in 1890, in addition to the one already in office in the lower, gave an opportunity of assimilating, to an important extent, the systems of the two portions of Burma, as will be mentioned a little later on. In Oudh, too, an additional Judicial Commissioner was sanctioned in 1890, and in 1891 special legislation enabled the two to sit together in cases of great impor-

Litigation and Crime.

tance, with, as just pointed out, a reference to the neighbouring High Court in case of difference of opinion. Assistance to the Judicial Commissioner in the Central Provinces, where the increase of litigation had thrown much extra work on this as upon the subordinate courts, was sanctioned under Act XVI. of 1885. There is a Judicial Commissioner also in Sindh, and one in Berar, who occupy much the same position as the corresponding officer in the Central Provinces. Most of these appointments are held by members of the Indian Civil Service, but with regard to the additional Judicial Commissioner in Oudh it has been specially provided that a barrister of not less than ten years standing, who is also an advocate of the High Court, and has a thorough knowledge of the vernacular language of the locality, may, if he be the best candidate available, hold the office.

Judges.

In the case of smaller areas of jurisdiction there is greater diversity of system and nomenclature. The general lines, however, both in the larger Provinces and in the more settled of the latter acquisitions are fairly uniform. Each district, or group of districts, forms the charge of a judge, immediately subordinate to the High or Chief Court or the Judicial Commissioner, as the case may be. In the district or group his court is the chief civil tribunal, and he also holds periodical Sessions for the trial of the more serious criminal charges, which are committed to him by the Magistrates within his territorial jurisdiction. In the Panjab, between the District Judge and the Chief Court, comes the Divisional Judge. In Assam and the Central Provinces only two judges hold office, one for each of the valleys of the former, and, in the latter, one for the Northern portion of the tract, or the Narbada Valley, and another for the Southern and Eastern, that is, the Nagpur and Chattisgarh divisions. In Bombay there are joint or junior judges for certain tracts, and a certain number of assistants, with varying jurisdiction, most of whom are now graded with the corresponding rank in the Revenue branch of the administration. Berar has but one judge in addition to the Judicial Commissioner. In Burma the pacification of the Upper Division has afforded the opportunity for assimilating the local system there to that which has been found to work well in the Lower Division. On the appointment of a Judicial Commissioner for the former, Commissioners of Divisions were empowered under Regulation VI. of 1890, to act as Sessions Judges, whilst under Regulation VII. they exercised the same functions in civil cases as their colleagues in Lower Burma. In both divisions the non-regulation system prevails, and a good deal of civil litigation has to be disposed of by the Revenue staff of each district, so that the local authorities considered it inadvisable to dissever the controlling officer entirely from this important part of the duties of his subordinates. The main distinction between the law as it now relates to the two parts of the Province is that the local administration is empowered to withdraw from its operation any tract in Upper Burma where the state of the country renders it necessary to forego the delay involved in committing serious charges for trial before other than the local responsible officer. The Deputy Commissioner, therefore, in tracts thus notified will exercise the powers of a Sessions Judge.

Subordinate Judges.

In Oudh, the separation of judicial functions from executive, except as regards magisterial powers, was effected in 1890. Next to the District Judges, in the Regulation Provinces and the others in which the same system is observed, comes in civil matters the numerous class of Subordinate Judges, divided into several grades, through whose hands passes the great bulk of the litigation of the country. In some Provinces below these again there are Munsiffs' courts, whose jurisdiction varies from petty village cases in Madras and some parts of the Deccan, up to a maximum of Rx. 200 under the Bengal, Assam, and North-West Province Courts Act. All these are under the control of the District Judge. In the Central Provinces, where the system is under gradual reform as officers become available, the work of the Subordinate Judges falls mostly to the Subordinate Revenue officers. Above these are the Assistant District officers, with the Deputy Commissioner as District Judge, and the Divisional Commissioner as an intermediate court before the Judicial Commissioner is reached. The lower grades of executive officers in Assam are invested with

with corresponding powers. In Upper Burma, below the Deputy Commissioner come the courts of the subdivisional, the township, and the circle officers respectively. Revenue cases are dealt with, as a rule, in India proper, by the executive subdivisional officers, but in Bengal the subordinate civil courts take cognisance of rent suits. LITIGATION AND CRIME.

Another class of Courts that has been found of great service is that of Small Causes, first established in the Presidency towns as far back as 1850, though the powers with which these courts are invested and also their procedure have been revised on several occasions by the legislature. The main object of their existence is the facilitation of the disposal of cases of a comparatively simple nature to which the procedure and agency of the High Court in the exercise of its ordinary original jurisdiction is unsuited. The most important feature of the Small Cause procedure is its finality. The record is as short as possible and there is no appeal in minor cases. The Act of 1882 was scrutinised a year or so ago with a view of finding out the points in which revision was necessary. It appeared that the law itself worked well, and in two of the Presidency courts its object was fulfilled efficiently. In the third, Calcutta, the delays that formed the subject of some complaint seemed to the Government to be remediable by modification of the rules framed under the Act rather than by alteration of the law. A few changes, however, were proposed, and these have been adopted in a Bill now under consideration. An appeal is to be allowed in suits of more than Rx. 1,000 in value, and definitions are introduced rendering it impracticable in future to obtain indirectly a decision of this court on questions of title, towards which attempts were continually being made in violation of the obvious purposes of the Act. It was proposed, too, to enlarge the jurisdiction of the Small Cause Court in Madras, so as to relieve the High Court of some of its less important work, but on further consideration an additional court was established under Act VII. of 1892, as has been mentioned in the chapter on Legislation. Presidency Small Cause Courts.

The same principle as is involved in the Presidency courts of this class has been extended to the interior. In some places Small Cause Courts have been specially established, but, as a rule, the special powers conferred on such tribunals have been vested in selected subordinate judges, or, under more recent legislation, in the District Judge himself. By Act IX. of 1887 the former law, dating from 1865, was amended. The jurisdiction of the above courts in regard to certain classes of suits was a matter of doubt, so it was determined to legislate on this point and to specify the classes of suits that were excluded, in place of attempting to include the whole body of cases in which jurisdiction was delegated. Furthermore, the powers of District Judges in respect to revision of the judgments passed by the subordinate courts was enlarged and better defined. In the Central Provinces, it may be mentioned, Act IV. of 1890 was passed to enable the Assistant Commissioners who are invested with Small Cause Court powers to get some of the suits falling within those powers off their hands into the court of subordinate officers equally competent to dispose of them were it not for the provisions of the Provincial Small Cause Court Act of 1887. Provincial Small Cause Courts.

The Madras Civil Courts Act, passed by the Governor General in Council in 1885, tended similarly in the direction of facilitating the disposal of the work before the ordinary courts. Under it a judge can be authorised to sit beyond his local jurisdiction. He is invested, also, with Small Cause powers to a certain extent, and the Munsifs, too, can receive the same addition to their powers within narrower limits. In the previous year, again, the Panjab Courts were remodelled by legislation, the Act of 1877 being repealed and re-enacted, to suit the new scheme of judicial agency and the distribution of the work. The amendments in the Bengal, Assam and North-West Province Courts Act of 1887, repealing the Bengal Civil Courts Act of 1871, are also worthy of note. In the first place, power is given to the Local Government to extend the jurisdiction of selected Munsifs to suits valued at not more than Rx. 200. The High Court, again, can now authorise the cognisance by subordinate judges and Munsifs of proceedings under the Succession Act of 1865 and the Probate and Administration Recent legislation affecting jurisdiction.

LITIGATION AND CRIME.

Administration Act of 1881. Finally, the value of Small Cause suits which a Munsif is competent to try is raised from Rx. 5 to Rx. 10. The Code of Civil Procedure was amended in 1888 in several important particulars respecting which doubts had arisen in the preceding ten years. These refer in the main to technical points and need not, therefore, be specially mentioned here. Taking the recent legislation on the above subjects as a whole, it will be found that its general tendency has been to take advantage of the marked improvement in the quality of the agency now available for judicial work by delegating to lower grades some of the powers hitherto vested in the higher officers only, so that, as the former are much more numerous than the latter, justice may be placed within easier reach of rural litigants, whilst, on the other hand, the release thus effected of the superior courts from a portion of their less important work enables them to give more attention to the revision and general control of that of their subordinates.

Criminal Courts.

In regard to the trial of criminal charges, the High Courts exercise original jurisdiction within the Presidency towns, with the control and supervision of the procedure of all the Sessions and Magisterial Courts throughout the regulation Provinces and Assam. The Chief Court in the Panjab has much the same powers so far as revision, appeal, and supervision are concerned, and so have the Judicial Commissioners in provinces where they hold office. The District Judges, too, as has been remarked above, are also the Sessions Judges in their charges, and have plenary jurisdiction, save that their sentence of death has to be confirmed by the High Court or Judicial Commissioner. In the Non-Regulation tracts where this office is not yet fully extended, the Divisional Commissioner officiates in the above capacity. There are a few exceptional cases, such as were mentioned in connection with the reorganisation of the jurisdiction of Upper Burma. The magistracy is divided into three grades, each with its specified powers. The District Magistrate is the same as the District Revenue Officer, and has the disposal of the police, and special powers in regard to certain cases of non-judicial action. All other magistrates within his jurisdiction are subordinate to him. The lowest grade of the regular magistracy can fine up to Rx. 5, and imprison up to one month. The next, or second class, has powers of fine up to Rx. 20 and imprisonment up to six months, and the first grade up to two years, and fine up to Rx. 100. For certain offences whipping is authorised, but the power to order it to be inflicted is not the invariable accompaniment of the lower grades of jurisdiction. In the Presidency towns there are magistrates appointed under special rules and with special procedure. Cantonments, too, are supplied with a magistrate of their own, as well as most of the larger towns. In many towns, too, benches of magistrates relieve by their gratuitous efforts the local officials of much of the petty work in connection with sanitation and municipal work generally. In the rural tracts, too, men of position and intelligence are often appointed honorary magistrates, whilst in some parts of the country restricted powers are conferred even on selected headmen of the principal villages. In all such cases the work of every month is recorded and sent up for scrutiny by the District Magistrate, that of magistrates of the first class is then forwarded by him to the Sessions' Judge, if there be one, and by the latter to the High Court or Judicial Commissioner. The Code of criminal procedure, re-enacted in 1882, and since amended in one or two points, provides ample means of obtaining by appeal or revision a thorough inquiry into each case. During the last 10 years there have been a few alterations in both this and the Penal Code, the more important of which were mentioned in a previous chapter. The jurisdiction of the district magistrate over European British subjects in certain cases, and the raising of the age of consent, are perhaps the topics that have excited most comment during the period under review, but in both cases the ferment scarcely extended beyond Bengal.

Appellate Courts.

The judicial system in force in most parts of British India includes a very extensive right of appeal and application for revision. Even in magisterial inquiries disposed of summarily further consideration is not beyond reach, and Small Cause Court decisions, so far as the course is not inconsistent with the object of the Act, are subject to both appeal and revision in certain

certain cases. The appeals from the lower civil judiciary are generally heard in the first instance by the District judge, or one of his more experienced subordinates, and from him an appeal lies to the High Court, or the tribunal that supplies its place. The Magistrate of the district hears the appeals from his subordinates, though, as a rule, where the district staff is fully manned, there is generally one, or even more, of the first-class magistrates duly empowered to fulfil this function within the subdivision. The district magistrate, however, usually keeps this branch of work a good deal under his immediate supervision, on account of the means it provides of judging of the competence of his subordinates in the discharge of their magisterial duties.

From this general outline of the distribution of judicial functions in India, we may proceed to the review of the amount and nature of the work that comes within the cognisance of the various tribunals, beginning with litigation of a civil character.

## B.—CIVIL LITIGATION.



The general distribution of the work does not vary materially from year to year, so the marginal statement, which refers to the returns of original jurisdiction for 1891-92, may be selected for comment. The original jurisdiction of the High Court is exercised on comparatively few occasions compared to the work done on the other side of these tribunals. Out of the 1,990 suits instituted under this head, Bombay leads the way with 732. Calcutta shows 100 less, and Madras 402. Most of the rest are from the Recorder's Court in Burma. Under the head of District Courts are included the Divisional tribunals of the Panjab and the higher courts of Burma and the Central Provinces. The classification, it may be remarked, is that returned by the provincial authorities, and is based accordingly on the local distribution of work. The range of suits in these courts, therefore, varies from 400 in Assam to 22,700 in the Panjab. We then come to the lower courts. The work of the unpaid is found chiefly in the Panjab, where the honorary civil judges entertained nearly 11,300 suits, and 2,000 were similarly returned from the neighbouring Province. Village courts are in operation mainly in Madras, where over 58,000 suits are credited to them against 6,000 in Bombay, where the institution is confined to the tract in which the Deccan Agricultural Relief Act is in force. In Lower Burma, too, about 23,300 suits are found under this head. Small Cause Court procedure seems most diffused in Bengal and Northern India. In the former over 42,000 suits were instituted in the year in question, and in the Punjab and North-West Provinces, 35,000 and 54,000 respectively. Bombay follows at a long interval, with 18,400. In Berar this mode of procedure is adopted in more suits than are filed in the ordinary course. The Presidency Courts of this class show remarkably uniform results. Bombay returns 29,500, Calcutta 26,000, and Madras 25,000. Looking at the different populations of the three cities, it seems that Madras holds the summary procedure in highest estimation. Finally, there are the paid subordinate tribunals and the revenue courts to be considered. As to the latter, out of 326,000 suits returned, no less than 268,500 are from the North-West Provinces. It is true that rent suits are nearly as numerous in Bengal, but they are disposed of by the civil subordinate courts. The latter, taking the country as a whole, entertained 59 per cent. of the total number of suits instituted, and the revenue tribunals, over 17½. Leaving on one side the revenue litigation, which is almost confined to one Province, it will be found that the lower stipendiary civil tribunals entertained from 98 per cent. of the total in Assam and Coorg, to 57 per cent. in the North-West Provinces, where, as we have seen, Small Cause Court procedure is getting

| Tribunal. | Suits Instituted in 1891-92. | Per Cent. |
|---|---|---|
| High and Chief Courts | 1,990 | 0·11 |
| District and Divisional Courts | 66,534 | 3·60 |
| Unpaid Courts | 14,147 | 0·76 |
| Village Courts | 87,537 | 4·73 |
| Provincial Small Cause Courts | 176,425 | 9·53 |
| Presidency Cause Courts | 85,740 | 4·63 |
| Paid Subdivisional Courts | 1,093,103 | 59·04 |
| Revenue Courts | 325,884 | 17·60 |
| Total | 1,851,360 | 100·00 |

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getting naturalised. In Upper Burma the proportion is 88, and in the Lower Division of that Province, assuming that the village courts represent much the same class of suit, 64. In Madras, Bombay, and the Panjab the percentage is about 65, and rises to three-quarters in the Central Provinces, and to 81 in Bengal. In respect to original jurisdiction, therefore, the above ratios indicate how important a part is played by the subordinate judge in Indian litigation.

Money valuation of the litigation.

This is almost as apparent when we come to consider the money value of the bulk of the suits filed. This value has, no doubt, shown a tendency to increase during the past decade; but, as the marginal table shows, it is still remarkably low. The general total gives, of course, a more uniform result. The proportion of suits less than 10 rupees in value fell from 23·6 per cent. to 21·98, whilst the next grade, that between 10 rupees and 50 rupees, increased its proportion from 45·4 to 46·4. The third class of suits, of the value of Rs. 50 to Rs. 100, fell slightly, from 16·10 to 15·97. The two next classes rose considerably. That relating to suits of between Rs. 100 and Rs. 500 in value was 13·18 against 12·66. Between this and the next group in the classified table there is a very remarkable gap, and the actual numbers fell, in 1881, from 178,600 to 17,900, and in the last year from 227,911 to 24,884, diminishing to the end of the table. Thus there were in the two years respectively, only 2·22 and 2·49 per cent. of the suits valued at more than Rx. 50, and less than a third attain to even one-tenth of that value. In two Provinces only, and those the smallest, does the percentage of suits less in value than Rs. 50 fall below 60, and in all the larger Provinces, except Bombay, the ratio approaches or exceeds 70.

| Province. | Mean Value of Suits Instituted. | | Per Centage in 1891-92 of Suits Valued at less than Rs. 50. |
|---|---|---|---|
| | 1881-82. | 1891-92. | |
| | Rs | Rs. | |
| Bengal | 117·59 | 133·86 | 68·48 |
| North-West Provinces | * | 79·66 | 72·96 |
| Panjab | 65·71 | 86·57 | 67·79 |
| Central Provinces | 62·50 | 89·83 | 69·76 |
| Assam | 86·10 | 96·31 | 64·84 |
| Madras | 142·49 | 156·95 | 71·18 |
| Bombay | 159·25 | 186·15 | 61·32 |
| Berar | 97·02 | 116·98 | 53·14 |
| Lower Burma | 150·50 | 166·58 | 58·44 |
| India | 117·13 | 123·54 | 68·36 |

* Differently computed.

Litigation as compared with population.

A point that may be briefly treated in passing is the relation between litigation and population. There is so much diversity in the character of the suits brought in different parts of the country that comparison is only practicable within broad limits. The marginal table gives the mean number of suits instituted by 10,000 inhabitants of each of the larger Provinces, but, as rent cases are so markedly more prominent in Bengal and the North-West Provinces than elsewhere, it is advisable to exclude them from consideration altogether. The exclusion at once deposes the two Provinces concerned from their position in the list, since it is the land that appears to breed most of the litigation in those parts, and 65 per cent. of the suits on the Court files of the North-West relate to rent. In Bengal the proportion is but 38. Discounting all this, it is certainly contrary to preconceived notions to find the Panjab so far ahead of what are popularly supposed to be the more litigious parts of India, and the explanation seems to lie in the fact of the former being at present thinly peopled, but with wide-spread credit; whereas under the land system of Bengal and the North-West Provinces there has sprung up a dense population amongst whom credit is comparatively restricted to those whose rights in the land are more or less protected against encroachment. This, however, is little more than conjecture. It will be noted that the proportion is low in an undeveloped country like Assam, but tends to rise amongst tenant-proprietors as in Madras, Bombay, and Berar. The Central Provinces stand high, owing, possibly, in some degree, to differences in classification of suits relating to land. The relative influence of large trading

| Province. | Mean Number of Civil Suits instituted per 100,000 of Population. | |
|---|---|---|
| | 1881. | 1891. |
| Bengal | 41 | 44 |
| North-West Provinces | 30 | 34 |
| Panjab | 131 | 118 |
| Central Provinces | 91 | 78 |
| Assam | 42 | 36 |
| Madras | 73 | 70 |
| Bombay | 84 | 90 |
| Berar | 82 | 77 |
| Lower Burma | 83 | 77 |
| Coorg | 159 | 218 |
| Ajmer | 157 | 127 |
| India | 60 | 61 |

trading centres, again, has its weight in several of the Provinces, where a good deal of the litigation is concentrated in commercial circles. Comparing the last year quoted in the table with the first, it seems that litigation has almost exactly kept pace with the growth of the population, if the whole country be taken into consideration. In Bengal, the North-West, and Bombay, there is a slight increase, which cannot be accounted for, as in the case of Coorg, by a decrease in the poorer classes of the population. On the whole, allowing for possible differences in grouping or recording generally, the tendency to litigation is probably much where it was 10 years back, and it is to this conclusion that the relative increase in the number of suits, other than those concerning rent, appears to point, for it approximates to 9 per cent., the growth of population in the tracts in question being about $9\frac{3}{4}$, and this inclusive of the rapid filling up of the wilder tracts, where the crop of litigation is at present immature.

Subjects of litigation.

The next topic to be discussed is the nature of the claims filed. The first year for which the current system of classification is available is 1885–6, but for the initial year of the decade the data regarding particular classes of suit are on the record and have been extracted, accordingly, for purposes of comparison. The marginal table gives the relative proportions of the main groups. The general coincidence of the two later years is worth notice. The divergence is chiefly in the direction of the substitution of written contract for other agreements and the growth of rent suits, a matter which affects mainly Bengal and the North-West Provinces. Still, if rent litigation be excluded, the proportion of suits on written contract rises to $45\frac{1}{2}$, and that of all suits for money or moveable property, from 62 per cent. to 87.

| Subject-Matter of Suits. | Per-centage of each Class of Claim. | | |
|---|---|---|---|
| | 1881-2. | 1885-6. | 1891-2. |
| Contract in writing | 39·24 | 31·02 | 32·26 |
| Contract not in writing | 10·53 | 10·09 | 8·64 |
| Account stated | 7·85 | 7·31 | 7·38 |
| Goods sold | 4·95 | 4·79 | 4·88 |
| Damages | – | 1·24 | 1·40 |
| *Total for Money or Moveable Property* | – | *62·69* | *61·67* |
| Arrears of rent | – | 16·32 | 18·23 |
| Ejectment | – | 7·47 | 8·39 |
| *Total, Rent and Revenue Suits* | *16·05* | *27·34* | *29·09* |
| Immoveable property | 5·88 | 5·25 | 5·44 |
| To establish right to immoveable property. | 1·31 | 1·76 | 1·66 |
| *Total regarding Titles, including Miscellaneous* | – | *9·19* | *9·22* |

The different distribution that prevails throughout the Provinces is best shown in a general proportional statement, such as is given below for 1891–92 :—

| Province. | Money. | | | Moveable Property. | | Total. | Rent and Revenue. | | | Title, &c. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | On Written Contract. | On Unwritten Contract. | Account stated. | Goods Sold. | Damages. | | Arrears. | Ejectment, &c. | Total. | Immoveable Property. | Total. |
| Bengal | 31·44 | 5·04 | 3·91 | 5·80 | 1·82 | 53·68 | 38·56 | – | 38·88 | 4·18 | 7·44 |
| North-West Provinces | 18·66 | 4·08 | 1·92 | 1·40 | 0·83 | 29·76 | 25·46 | 32·12 | 65·34 | 3·20 | 4·90 |
| Panjab | 35·74 | 13·39 | 18·46 | 1·93 | 0·55 | 78·40 | 5·63 | 2·50 | 9·23 | 9·14 | 12·38 |
| Central Provinces | 41·34 | 16·93 | 4·93 | 5·90 | 2·77 | 78·93 | 8·62 | 1·52 | 11·63 | 5·38 | 9·45 |
| Assam | 38·45 | 5·64 | 2·17 | 10·21 | 7·33 | 73·03 | 12·12 | – | 12·34 | 6·34 | 14·64 |
| Madras | 34·78 | 15·56 | 10·70 | 6·79 | 0·87 | 81·64 | – | – | 2·52 | 8·05 | 15·84 |
| Bombay | 48·56 | 6·15 | 11·20 | 8·43 | 0·83 | 81·47 | 2·28 | 7·37 | 9·96 | 4·51 | 8·57 |
| Berar | 55·00 | 11·83 | 13·69 | 1·14 | 0·53 | 87·30 | – | – | – | 6·99 | 13·70 |
| Lower Burma | 26·29 | 18·14 | 0·73 | 15·36 | 7·54 | 92·22 | – | – | – | 3·97 | 7·78 |
| Upper Burma | 20·98 | 13·36 | 1·30 | 14·32 | 4·22 | 78·52 | – | – | – | 16·67 | 21·48 |
| India | 32·26 | 8·64 | 7·38 | 4·88 | 1·40 | 61·67 | 18·23 | 8·39 | 29·09 | 5·44 | 9·22 |
| „ excluding Rent and Revenue Suits | 45·51 | 12·19 | 10·42 | 6·88 | 1·98 | 86·99 | – | – | – | 7·68 | 13·01 |

The first point that will attract attention, no doubt, is the weight lent by Bengal and the North-West Provinces in pulling down the general proportion of suits on written contract, since with the exception of Burma, they are the only two items that fall below the mean of the country as a whole. But when the revenue suits are set aside, the proportion of the above class of suits rises to 51 and 54 per cent., respectively, which is far above the general proportion. The same may be said of the Central Provinces, where from

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from 41·3 per cent. the subtraction of the rent suits raises the figure to 47. In Assam and Madras the difference made is but insignificant, and in Bombay it amounts to 5 per cent. only. Thus it is in Burma alone that the practice of suing on bond falls materially below the general proportion, and this is counterbalanced, to some extent, by the higher ratio of the suits not on bond and for goods sold. In spite of the far greater prevalence of instruction amongst the men in Burma, as compared with the rest of the country with which we are now dealing, the use of paper has made but little way in rural tracts, and perhaps the customary black-lacquer board used with a steatite pencil is not found suitable to commercial transactions, or else the debtor's word before witnesses is held to be as good as his bond. There is little requiring special remark in the rest of the table, except as regards the difference in the nature of the suits brought under the head of rent or revenue. In Bengal, where such suits constitute, as has been seen above, 38 per cent. of the whole, the bulk consists of suits for arrears, with few ejectments, whereas in the North-West Provinces the former average about a quarter of the whole, and the latter nearly a third. In Assam, the Panjab, and the Central Provinces the tendency is in favour of the Bengal practice. In Madras the suits are of a different character, and the majority seem to be based on claims to annual agreements or leases of arable land. In Bombay, with the exception of a few thousand suits for arrears, with or without ejectment, the revenue cases are usually those regarding the right to immediate possession of land or other immoveable property, liable to final decision by a regular civil tribunal, and are only brought under this head by reason of their trial by the subordinate revenue authority of the subdivision. There is also one other point of importance which is only mentioned in the return for the Panjab, namely, that in that Province, out of 271,400 suits, no less than 112,200 were brought by the money-lending classes against the agricultural. To appreciate the bearings of this fact it is necessary to note, also, that in this Province the ratio of the suits for immoveable property is the highest in India, excepting that returned from Upper Burma, where revenue and rent suits do not appear on the list.

Disposal of suits.

So far the only suits that have been considered are those filed during the year 1891–92, but when the actual work done by the Courts in that year comes under review it is necessary to include the suits that remained undisposed of at the end of the preceding year, as well as the corresponding number bequeathed by that under review to its successor. In this way, the tribunals had before them 2,002,664 suits for disposal, as compared with 1,617,483, ten years back, and 1,953,252 in 1890–91. The following table shows, in a general way, how they were treated. It will be observed that about 12½ per cent. remained over at the close of the year, and that this proportion is slightly in advance of the corresponding figure ten years ago. Except in Bombay, this feature is common to all the Provinces, though the difference in some is so small that it need not be specially noticed. The widest divergence is found in the case of Berar, and next to it in the accumulation of work come the Central Provinces and Bengal.

| Province. | Settled without Trial. | | Uncontested. | | Contested. | | | | Referred to Arbitration. | | Remained undisposed of at end of Year. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Judgment for Plaintiff. | | Judgment for Defendant. | | | | | |
| | 1881. | 1891. | 1881. | 1891. | 1881. | 1891. | 1881. | 1891. | 1881. | 1891. | 1881. | 1891. |
| Bengal | 12·1 | 14·2 | 53·9 | 52·5 | 16·1 | 13·9 | 5·8 | 3·8 | 0·4 | 0·3 | 11·7 | 15·3 |
| North-West Provinces | 14·3 | 12·6 | 43·0 | 49·4 | 23·1 | 20·5 | 10·8 | 6·9 | 1·2 | 0·5 | 7·6 | 10·1 |
| Panjab | 18·2 | 19·0 | 44·5 | 45·1 | 20·7 | 21·2 | 8·6 | 6·9 | 1·3 | 0·5 | 6·6 | 7·3 |
| Central Provinces | 19·0 | 18·5 | 49·1 | 43·7 | 19·2 | 20·5 | 6·6 | 7·4 | 0·2 | – | 5·8 | 9·9 |
| Assam | 14·9 | 20·9 | 49·8 | 41·3 | 15·8 | 16·2 | 8·6 | 7·8 | 0·5 | 0·2 | 10·4 | 13·6 |
| Madras | 12·4 | 14·8 | 52·1 | 49·4 | 16·3 | 14·8 | 5·5 | 5·0 | 0·2 | 1·2 | 13·4 | 14·8 |
| Bombay | 8·7 | 8·8 | 54·8 | 55·1 | 15·2 | 16·7 | 3·3 | 4·6 | 0·6 | 0·5 | 17·3 | 14·3 |
| Berar | 5·5 | 9·1 | 59·8 | 53·3 | 21·6 | 16·9 | 5·8 | 5·1 | 0·1 | 0·3 | 8·1 | 15·2 |
| Lower Burma | 20·9 | 21·9 | 37·8 | 38·3 | 24·6 | 24·1 | 12·8 | 10·6 | 0·6 | 1·2 | 3·3 | 3·9 |
| India | 13·8 | 14·6 | 50·0 | 49·8 | 18·2 | 17·1 | 6·8 | 5·5 | 0·6 | 0·5 | 10·6 | 12·5 |

But

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But now that the total amount of work before the courts has been shown, it is useless to treat further of the portion of which they were unable to dispose within the period under review, so the following remarks apply only to the suits that were actually removed from the list during that time. The following statement, accordingly, gives the percentage in 1891–92 of each head under which an order of disposal was passed :—

| Province. | A. Compromised, or settled without Trial. | B. In favour of Plaintiff. | | | | | C. In favour of Defendant. | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Judgment confessed. | Decreed *Ex-parte.* | Contested. | By Arbitration. | Total. | Dismissed *Ex-parte.* | Contested. | By Arbitration. | Total. |
| Bengal | 32·55 | 6·28 | 39·49 | 16·39 | 0·23 | 62·39 | 0·44 | 4·55 | 0·07 | 5·06 |
| North-West Provinces | 26·25 | 13·29 | 26·51 | 22·78 | 0·42 | 63·00 | 2·92 | 7·69 | 0·14 | 10·75 |
| Panjab | 38·63 | 16·69 | 12·35 | 22·83 | 0·46 | 52·33 | 1·54 | 7·39 | 0·11 | 9·04 |
| Central Provinces | 30·88 | 19·14 | 18·01 | 22·75 | 0·04 | 59·94 | 0·98 | 8·19 | 0·01 | 9·18 |
| Assam | 33·59 | 6·51 | 31·59 | 18·73 | 0·20 | 57·03 | 0·33 | 9·03 | 0·02 | 9·38 |
| Madras | 34·00 | 10·96 | 29·05 | 17·37 | 0·68 | 58·06 | 1·35 | 5·91 | 0·68 | 7·94 |
| Bombay | 30·30 | 11·77 | 30·93 | 19·53 | 0·57 | 62·80 | 1·50 | 5·37 | 0·03 | 6·90 |
| Berar | 25·74 | 27·36 | 19·52 | 19·57 | 0·29 | 67·14 | 1·09 | 5·96 | 0·07 | 7·12 |
| Lower Burma | 29·32 | 13·51 | 19·19 | 24·32 | 0·58 | 58·10 | 1·57 | 10·83 | 0·18 | 12·58 |
| Upper Burma | 30·94 | 11·95 | 10·83 | 29·52 | 1·48 | 53·78 | 2·28 | 12·51 | 0·49 | 15·28 |
| India, 1891 | 32·22 | 11·58 | 28·40 | 19·62 | 0·41 | 60·01 | 1·34 | 6·25 | 0·18 | 7·77 |
| *India, 1881* | *32·07* | *13·95* | *23·80* | *20·23* | *0·58* | *58·56* | *1·69* | *7·53* | *0·15* | *9·37* |

In the case of the total for all India the corresponding figures for 1881 are added, and as usual where such large numbers are concerned, the tendency to uniformity is singularly apparent. For example, the proportion of the cases that are settled by compromise, or not brought into court, is nearly identical in the two years. Judgment by confession has gone back a little, and the same may be said of arbitration in favour of the plaintiff, and the suits he gains after contest. On the other hand, he stands in a far better position as regards the suits decreed in his favour when the adversary does not put in an appearance, and this last is, perhaps, the most striking feature of the return. The plaintiff's chance of getting a decree, owing mainly to the increase in the proportion of cases passed in his favour in the absence of the defendant, has risen from about 6 to 1, to 7 to 1. A few general remarks on the provincial details will suffice to supplement the table. Suits withdrawn without trial are relatively most common in Lower Burma and Assam, and compromise, in the same Provinces, is in disfavour. On the contrary, the Bombay litigant is at the bottom of the list in respect to the former way of disposing of his case, and at the top of it as regards compromise. In the Panjab, both are in favour, and the result is that this Province heads the roll on the combination of the two, and is followed by Madras, where the bias is very slightly in favour of avoiding trial. As to judgment by confession, the only observation required is to point out the remarkable difference between Berar and the rest, the nearest to its ratio in this small Province being that in the neighbouring tract of the Central Provinces. In Bengal and Assam this mode of settlement is at a considerable discount. We then reach the largest item of the whole, though it does not hold this position in all parts of the country. In Upper Burma, for instance, it is far inferior to the contested suit; in Berar it falls short of both the latter and the confession, with which, possibly, it may be in some cases combined. Of the larger Provinces, the Panjab shows the greatest contempt for this method of letting plaintiffs off without a run for their money, on the other hand, in Bengal nearly 40 per cent. of the suits

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are thus treated, against only 21 per cent. contested. In Assam, too, as in Bombay and Madras, it exceeds the contested in its proportion to the whole litigation of the year. As far as the proportion of contested suits is concerned, the two extremes are occupied by Bengal, where the figure is only 21 per cent. as above stated, and Upper Burma, where, in the present circumstances, it is just double that proportion. Less than a quarter of the cases disposed of are contested in Madras and Bombay, and only just above that fraction in Berar. The general average is about 26 per cent., which is exceeded in Assam, the Central Provinces, the two Northern Provinces, and, as just remarked, Upper Burma, which is in close proximity to its sister division. Arbitration, as will have been seen from the above table, is by no means a favourite mode of procedure. In the few cases in which it is tried, so far as the returns go, it seems more favourable to the defendant than a contest, a fact which, having regard to the general character of the litigation, may account for its avoidance. In Madras, where alone there has been a considerable number of suits thus referred during the last four years, the award has been against the plaintiff in more cases than in his favour, whereas in the case of contested suits, it appears that the average percentage of those in which he won was 72·8 in 1881 and 75·8 in 1891. The ratio varies, indeed, between 67 in Assam and 78 in Bombay and Bengal, and in Madras it was in the year last named, 74·6. Reverting to the table given above, it will be seen that the defendant has most in his favour, numerically speaking, in Upper Burma, and least in Bengal, as in the case of contested suits just noticed. It is impracticable to allocate the provinces in regard to the success of their plaintiffs, since it is uncertain what part, known to be a considerable one, of the cases compromised or withdrawn did not practically result in their advantage.

There remains the question of appeals. As has been pointed out in the first section of this chapter, the Indian forensic system includes abundant provision for obtaining revision of the original order passed by the lower courts. The following Table, which deals with the figures of 1891–92, shows

| Province. | District Courts. | | | | Revenue Courts. | | Chief Courts of Provinces. | | Total. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chief Courts | | Other Courts. | | Appeals. | Balance. | Appeals. | Balance. | Appeals for hearing. | Remaining unheard. |
| | Appeals. | Balance. | Appeals. | Balance. | | | | | | |
| Bengal | 15,042 | 8,174 | 19,840 | 5,976 | 1,040 | 285 | 4,531 | 2,148 | 40,453 | 16,583 |
| North-West Provinces | 10,738 | 5,488 | 10,330 | 2,631 | 8,357 | 2,267 | 4,902 | 2,906 | 34,327 | 13,292 |
| Panjab | 15,418 | 3,465 | 3,149 | 184 | 4,309 | 565 | 2,447 | 1,252 | 25,323 | 5,466 |
| Central Provinces | 3,630 | 464 | 3,544 | 639 | - - | - - | 938 | 328 | 8,112 | 1,431 |
| Assam | 907 | 525 | 672 | 164 | - - | - - | 124 | 69 | 1,703 | 758 |
| Madras | 10,236 | 3,939 | 3,501 | 910 | - - | - - | 4,121 | 2,148 | 17,858 | 6,997 |
| Bombay | 9,211 | 4,389 | * | * | - - | - - | 2,246 | 1,093 | 11,457 | 5,482 |
| Berar | 595 | 258 | 399 | 87 | - - | - - | 581 | 264 | 1,575 | 609 |
| Ajmer | 63 | 20 | 126 | 27 | - - | - - | - - | - - | 189 | 47 |
| Coorg and Bangalore | 77 | 3 | 71 | 4 | - - | - - | 60 | 15 | 208 | 22 |
| Burma | 1,968 | 147 | 28 | - - | - - | - - | 239 | 46 | 2,235 | 193 |
| Total | 67,885 | 26,872 | 41,660 | 10,622 | 13,706 | 3,117 | 20,189 | 10,269 | 143,440 | 50,880 |

* In Bombay all District Courts are shown together.

the advantage that is taken of this opening in respect to the decisions of the four chief classes of tribunals. Appeals, it should be mentioned, that are returned as having been transferred to courts in provinces other than that in which they were lodged, are not taken into consideration in the latter, as they are probably included in the work of the former. Appeals from

from miscellaneous orders, too, are omitted, and only those from decrees shown. It appears that, on the whole, two-thirds of the work was disposed of in some way or other. The revenue courts, having comparatively simple issues before them, got through over three-fourths, and the district courts, other than those in the highest grade, were but little behind. The higher the grade, the higher the proportion of arrears. In the district chief courts the ratio of arrears was 39 per cent., and in the Presidency and other courts of superior jurisdiction only one-half the work was achieved. But it is clearer, perhaps, to show this branch of judicial work in a proportional form, so the following Table includes, with the results for 1891–92, those for 1881 and 1885, all given in percentages of the total number of appeals before the courts, or else of that number minus the balance left over at the end of the respective years.

| PROVINCE. | Total Number of Appeals before Court. | | | Percentage of Appeals disposed of in the Year:— | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Percentage on Cases before the Courts. | | | Percentage of Appeals disposed of within the year. | | | Confirmed. | | | Reversed. | | | Rejected, Modified, or otherwise dealt with. | | |
| | 1881. | 1885. | 1891. | 1881. | 1885. | 1891. | 1881. | 1885. | 1891. | 1881. | 1885. | 1891. | 1881. | 1885. | 1891. |
| Bengal | 8·1 | 7·3 | 6·4 | 55·1 | 67·2 | 59·0 | 57·8 | 59·4 | 59·3 | 18·0 | 15·9 | 16·7 | 24·2 | 24·7 | 24·0 |
| North-West Provinces | 11·7 | 11·8 | 11·2 | 77·4 | 73·1 | 62·9 | 59·0 | 59·1 | 62·3 | 18·6 | 16·9 | 17·0 | 22·4 | 24·0 | 24·8 |
| Panjab | 8·5 | 9·4 | 8·3 | 82·8 | 80·1 | 84·2 | 41·1 | 58·9 | 59·7 | 17·2 | 19·9 | 18·6 | 41·7 | 21·2 | 21·7 |
| Central Provinces | 5·0 | 6·8 | 7·7 | 88·5 | 88·0 | 82·4 | 48·1 | 42·7 | 57·6 | 18·7 | 17·5 | 18·3 | 33·2 | 39·8 | 24·1 |
| Assam | 7·0 | 5·1 | 5·9 | 69·3 | 83·3 | 56·4 | 65·0 | 65·0 | 72·1 | 16·4 | 19·3 | 13·9 | 18·6 | 15·7 | 14·0 |
| Madras | 4·4 | 4·1 | 5·7 | 71·1 | 62·3 | 60·1 | 55·1 | 55·2 | 58·1 | 17·2 | 16·2 | 13·7 | 27·7 | 28·6 | 28·2 |
| Bombay | 4·4 | 5·3 | 4·9 | 53·2 | 45·4 | 52·2 | 54·1 | 62·9 | 65·4 | 13·0 | 13·6 | 14·1 | 32·9 | 23·5 | 20·5 |
| Berar | 3·2 | 3·1 | 5·9 | 80·9 | 81·7 | 61·3 | 41·1 | 58·0 | 56·8 | 20·1 | 19·0 | 14·9 | 38·8 | 23·0 | 28·3 |
| Lower Burma | 6·1 | 4·8 | 4·3 | 90·6 | 88·9 | 89·9 | 62·8 | 61·3 | 66·5 | 24·6 | 24·0 | 21.6 | 12·6 | 14·7 | 11·9 |
| Upper Burma | — | — | 6·1 | — | — | 95·3 | — | — | 57·9 | — | — | 26·2 | — | — | 15·9 |
| India | 7·2 | 7·4 | 7·1 | 69·0 | 70·8 | 65·2 | 52·9 | 60·0 | 61·1 | 17·7 | 17·2 | 17·3 | 29·4 | 22·8 | 21·6 |

It presents, on the whole, remarkable regularity between the three years, when taken for the country at large. The proportion of appeals to the total number of suits before the courts is almost uniform, with a slight tendency to decrease. This feature is most marked in the case of the larger Provinces where the number of appeals is still the highest, that is, in Bengal, the North-West and the Panjab. The tendency lies in the opposite direction in Madras, the Central Provinces, Burma, and, to a higher degree, in Berar. As to the disposal of this class of work, the bias is in the same direction, on the whole, and with the decrease in the proportion of appeals there is a diminution in that of the number disposed of, except in Bengal and the Panjab. The decrease is most marked in the North-West Provinces, Madras, Berar and Assam. We may now leave the gross number of appeals behind, and consider only those disposed of by the courts. In the case of these, it appears that the tendency is to find the original judgment better grounded than it used to be ten years ago, for whereas only 53 per cent. of the judgments brought before the courts were then confirmed, in 1885 the ratio rose to 60, and now stands at 61. Of the larger Provinces, Bombay and the North-West exceed this average, and Assam and Lower Burma, of the smaller. But, looking back to 1881, the widest difference in the proportion will be found in the Panjab, 18·6 per cent., Berar, 15·7, and Bombay, 11·3, with Bengal, 1·5, and Madras and the North-West Provinces, about 3, at the other end of the scale. In respect to the reversal of original decrees the decrease in the proportion is nominal for the whole country, but in Berar it is decidedly large, and no other Province shows anything approaching the difference there found between the 1881 and 1891 ratio. It is to be hoped that the decrease is a sign of the improvement of the work of the lower courts. In 1881, the highest percentage of cases in which the original decision was upset was found in Burma, where the same feature is observable ten years later, but in India proper Berar has given place to the Panjab in this respect, and Bombay, where

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where there was least disturbance of original decrees, now falls below Madras and Assam. The last section of the statement includes the cases in which the decision was modified, with the slightly smaller number of instances in which the application was rejected, and of those in which the appeal was remanded for further inquiry. These miscellaneous ways of disposing of the business have apparently decreased on the whole, relatively to the number that came before the courts. The diminution in the proportion is very marked in Bombay, the Panjab, Berar, and the Central Provinces. It is very slight in Bengal and Burma, and the rate has increased a little in Madras and the North-West Provinces. Rejections seem more numerous in the three large provinces of the north and east than in the rest of the country, where modification composes the bulk of this item. It seems hardly worth while to enter into further details of the variation in litigation from year to year, more particularly as the returns show that the general tendency is towards the maintenance of a general level. As so much of the business of the courts is provided by the agricultural classes, and the amounts involved are so small, it is obvious that the character of the season must make some difference in the number of suits filed or other proceedings taken by the creditor class, but the analysis of the returns with the view of ascertaining to what extent this cause is operative in a particular year is a matter for local experience, and seldom finds a place even in the provincial review of the annual results. Another cause for increased litigation in Upper India is the revision of the settlement of land revenue, which is usually accompanied by a crop of suits instituted merely to ascertain the respective positions of the landlord and his tenantry under the new conditions. In the North-West Provinces, for instance, there was a decided diminution in the number of suits filed in several districts where it was distinctly traceable to the completion of the settlements. In the Deccan, again, the Agricultural Relief Act carries with it a varying amount of litigation which would otherwise have been brought on to the file in the regular courts. In 1891 the number of suits brought under this Act before village tribunals was about 6,000, against 7,200 in the preceding year. The total number of suits of all kinds before the courts was 2,002,000 against 1,953,000, but the value decreased by Rx. 2,163,700. The year before, again, the number was higher than in 1890, but the value considerably less, and so on. To bring these figures into this review without adequate explanation of the variations is tantamount to throwing into text what is already available in a form handy for reference in the Statistical Abstract, and, as observed above, detailed explanation is beyond reach. It is as well, therefore, to pass on to the next section of the subject.

## CRIME AND CRIMINAL JUSTICE.

Crime and Criminal Justice.

Looking merely at the number of charges laid, it would seem as though the proportion of crime to population were exactly equal to that of Civil litigation, withdrawing the revenue suits. In the year 1891 there were in each case 60 suits or charges to 10,000 of the population, the only difference being that the tendency of the former has been to remain stationary, whereas the latter inclines towards an increase, since in 1881 the proportion was 55, and in 1886, 59, only. But on further examination this apparently high criminality in a great degree disappears. It is necessary, in the first place, to eliminate the charges that are absolutely without foundation. In the case of civil litigation, a false claim is attended with some considerable expense, but a report to the nearest police station costs nothing, and a summons from a Magistrate's Court very little. Then, again, there are numbers of cases in which a charge under the criminal law is preferred in order to obviate the necessity, in the eye of the complainant, of a suit for possession or damages. Trespass, mischief, cheating, and the various cases in which conjugal relations are in question, all come into the above category. Thus, to begin with, some 16 per cent. of the charges brought

brought are thrown out as containing no grounds for investigation by criminal authorities, and only 71½ per cent. are brought to trial. Omitting for the moment the latter class, and considering only the "true cases," as they are technically termed, we find the proportion to the complaints varying from 68 per cent. in the Panjab to 96 in Upper Burma, and 93 in the Lower Division of that Province. In India proper, the ratio is highest in Madras, where it reaches 95 per cent., including all classes of charge, and it is above the general mean of 84, in the Central Provinces, Bengal and Bombay, of the larger Provinces, and below it in the North-west Provinces, Assam, and Berar. It is necessary to explain that the proportion of true cases is by no means a certain indication of the prevalence of crime, since it depends a good deal on the personality of the officers who have the power of decision of this point, and it is natural for the police, in cases in which they are directly concerned, to endeavour to get struck off as false, a complaint in regard to which they may have failed to discover the offender. Of late years, however, the scrutiny of the magistracy of the record of such cases has been, by the special instructions of the Government, more strict than before, so it may be assumed that the proportion, at least so far as the whole of India is concerned, is fairly representative of the actual facts. The extraordinarily high proportion of the cases struck off in the Panjab, indicating that little more than two out of every three charges brought have any foundation, is borne out, to some extent, by other statistics which will be discussed later on in this section. On the whole, if we take the true cases only, it will be found that they reach a proportion of 40 per 10,000 of the population in 1881, and 44 in 1891. Of the larger Provinces, Lower Burma heads the list on both occasions. In respect to some of the others there have been changes of classification of crime which obscure the comparison, and the addition to the roll of municipal cases, again, tends in the same direction. But Bengal, Madras, the North-west Provinces and the Panjab, all maintain an even ratio, allowing for some increased efficiency of police action. In Berar and Assam there has been a slight retrocession in the proportion. In the Central Provinces the proportion has gone from 37 to 24 in 10,000, a movement which, like that from 41 to 85 in Bombay, is evidently due to change of record, not of the habits of the people.

True Cases.

The next point for consideration is the class of crime that comes upon the charge sheet. From one point of view there are two sections of offences. First, that for which the police are empowered to arrest without a warrant, which is technically known as cognisable crime; the second, non-cognisable, or that in which the police can only take action under magisterial authorisation. To some extent the division is in accordance with the gravity of the offence, but not invariably, as in certain classes of crime there is obviously no need for the police to intervene on their own responsibility, and in others the responsibility is divided on administrative grounds. Nuisances, for example, appear in all three categories. On some occasions they are neither suddenly caused nor immediate in their results, so that they are approached through the magistrate's initiative. In other cases, the action of which complaint is made falls within a municipal bye-law, so the case is brought before the magistrate by the Corporation, and the police only serve process on the parties concerned. Finally, a large number of these cases are noted by the police whilst the offence is still hot, and an example can be made summarily. Of the more serious offences, forgery falls into the second category, and so do false evidence and bribery on the relatively rare occasions on which they are brought into court, and offences relating to marriage, which are by no means rare, in some parts of the country at least. Interchanges between the two classes are occasionally made when the Criminal Procedure Code is under revision, with a view to furthering the more prompt discovery or disposal of the charge. Though the actual numbers of charges differ considerably from year to year, as the following tables will show, their relative proportions are fairly uniform, so the returns for 1891 may be safely used for purposes of comment. In that year, out of some 1,301,100 offences reported, 56 per cent. come under the head of cognisable, and 44 are classed as non-cognisable. Taking the former

Character of the offences returned.

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former into consideration first, the actual number of cases reported under the chief heads are given in the following statement for several years :—

| CHARGE REPORTED. | 1880. | 1884. | 1886. | 1888. | 1890. | 1891. |
|---|---|---|---|---|---|---|
| Murder | 1,779 | 1,973 | 2,291 | 2,450 | 2,424 | 2,546 |
| Other serious offences against the person | 18,014 | 26,135 | 27,568 | 27,936 | 27,055 | 27,343 |
| Rioting, and other offences against the public peace | 7,825 | 10,284 | 10,857 | 11,195 | 10,845 | 11,066 |
| Gang robbery (*dacoity*) | 981 | 975 | 2,953 | 1,876 | 1,631 | 1,613 |
| Cattle theft | 21,577 | 19,319 | 21,167 | 26,863 | 26,373 | 26,867 |
| Other thefts | 152,742 | 175,529 | 168,384 | 175,250 | 179,832 | 178,735 |
| Housebreaking | 79,527 | 104,468 | 108,965 | 130,906 | 142,040 | 153,581 |
| Public or local nuisances | 81,268 | 97,926 | 103,359 | 116,445 | 128,184 | 136,716 |
| Vagrancy, &c. | 11,024 | 9,109 | 11,204 | 16,710 | 14,139 | 17,253 |
| TOTAL cognisable charges | 585,904 | 578,745 | 637,574 | 688,518 | 705,704 | 732,832 |

According to this return, the number of cognisable charges has been steadily rising for the last 11 years, though, if we take the items separately, it appears that only house-breaking and nuisance manifest this tendency. In the rest there are periodical fluctuations. But it is worth while to examine this statement in a proportional form. As it stands, it shows one charge of this class to every 340 of population in 1880; to every 327 in 1886, and to every 298 in 1891. For purposes of comparison, however, it is safer to take, not the charges, which are influenced by a great number of conditions, but the convictions, which, though they vary considerably, are subject to fluctuation less in extent and on more uniform lines. The following table, accordingly, gives the percentage of each of the above-mentioned offences in which a conviction followed the charge, on the total number of convictions passed in cognisable cases for the years selected. In order to confirm the opinion above-expressed, that the judgment of a court is less liable to fluctuation than the tendency to bring a charge, the percentage of convictions are added, and these, on the whole body of crime, if not in all cases on the individual offence, show but insignificant variation. In 1880 just under 43 per cent., and in 1886 just under 44 were convicted; whilst the figure for the last year of the series falls a little short of both :—

Convictions.

| CHARGES. | 1880. | | 1886. | | 1891. | |
|---|---|---|---|---|---|---|
| | Percentage on Total Convictions on Cognisable Charges. | Percentage on Convictions on Total Charges reported. | Percentage on Total Convictions on Cognisable Charges. | Percentage of Convictions on Total Charges reported. | Percentage on Total Convictions on Cognisable Charges. | Percentage of Convictions on Total Charges reported. |
| Murder | 0·31 | 44 | 0·28 | 33 | 0·31 | 37 |
| Other serious offences against the person | 3·56 | 49 | 4·02 | 40 | 3·90 | 43 |
| Rioting and other offences against the public peace | 1·77 | 57 | 1·80 | 46 | 1·81 | 50 |
| Gang robbery (*dacoity*) | 0·13 | 32 | 0·16 | 15 | 0·12 | 23 |
| Cattle theft | 3·31 | 38 | 2·39 | 31 | 2·63 | 30 |
| Other theft | 19·73 | 32 | 17·63 | 29 | 18·22 | 31 |
| Housebreaking | 5·24 | 16 | 4·09 | 10 | 5·81 | 12 |
| Public or local nuisances | 29·01 | 90 | 33·93 | 91 | 40·93 | 91 |
| Vagrancy, &c. | 3·41 | 78 | 2·94 | 72 | 4·18 | 73 |
| *Other cognisable offences* | *33·53* | — | *32·76* | — | *22.09* | — |
| TOTAL, cognisable | 100·00 | 42·9 | 100·00 | 43·8 | 100·00 | 41·5 |

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It is difficult to assign to the decreased proportion any special cause, such as the increased reverence for the technical side of the law, or the greater efficacy of legal practitioners in harmony with the spread of their employment. For the present, it is enough to notice that the results for all the three years agree so far as to show the highest ratio of conviction in the less serious cases, such as nuisance, vagrancy, and rioting. The other column of the statement are more relevant to the subject immediately before us, namely, the prevalence of the more serious offences. Out of the total number of convictions passed for cognisable offences, a proportion varying between 66 and 73 per cent. fall under one or other of the offences specified in the table, the tendency being in the direction of their increasing preponderance. But it must also be noted that in the three years, 29, 34, and 41 per cent., respectively, of the total number of convictions were passed in cases of nuisance, and that this is the only class of offence that shows a decided and steady increase. It is true that rioting and minor offences against public tranquillity tend in the same direction, but the movement is of the very slightest, but the rest oscillate considerably. If nuisance and vagrancy be deducted, the more serious offences are reduced to 34, 30, and 33 per cent. of the whole. Taking a few of these separately, house-breaking, with which is included house-trespass with intent to commit an offence, comes next in relative number to theft, but the proportion of convictions is the lowest in the list. It appears, therefore, that the charge is too often made somewhat recklessly. It is one that is easily brought against anyone who may be reasonably presumed to have intimate knowledge of the complainant's premises. It covers, too, the disposal of moveable property, the loss of which happens to be temporarily convenient, and is useful, according to the ideas of a portion of the community, in other respects. Thefts, again, are peculiarly difficult to prove in India, where the property thus obtained is by no means easy to identify, owing to the tendency to uniformity in the use of ornaments and household vessels, and the habit of hoarding cash, and of disregarding the numbers of currency notes that may fall into the possession of the travelling public. In many cases, too, as was mentioned above, the question involved is purely one of title, and the charge of theft is brought with the view of recovering the property in dispute. Cattle lifting is most rife, so far as British territory is concerned, in Sindh and the South-West Panjab, but there are numerous cases of a less organised character in the North-West Provinces, where in a season of scanty rainfall it is the practice to turn loose the weakly cattle on to the village waste on the chance of their picking up a meagre livelihood thereon. In this Province, therefore, the distinction between theft and the misappropriation of stray animals is an important one, and on investigation the number of charges that can rightly form the subject of magisterial inquiry is reduced far below that of the cases first reported. Rioting, again, is a charge of a very comprehensive character, and includes the ordinary disturbance of the public peace consequent on the participation of the neighbours in a domestic grievance, which is natural amongst a people that live chiefly out of doors, to the serious conflicts between religious bodies in the principal cities. Since 1885, when important festivals of the Musalman and the Brahmanic forms of faith happened to come into chronological coincidence, disturbances of this sort have been necessarily more frequent, irrespective of other and local causes of dissension. The most serious rioting however, between these communities has taken place since the close of the period to which the returns under discussion relate, and will be mentioned in the review for 1892–93 or the succeeding year. We thus reach the residuum of murder, gang-robbery, and serious offences against the person, such as culpable homicide not amounting to murder, hurt with dangerous weapons and other grievous hurt, and so on. These last are of a miscellaneous nature, and all that need be said of them is that they have increased according to the return of convictions in a considerably higher ratio in the decade than the murders, and that the lesser amongst them are by far the most numerous, as is only to be expected. They were proved in only about 9,000 instances in 1880, and in 11,900 in 1891. Murders were reported in the proportion of one in 111,754 of the population in 1881, one in 90,941 in 1886, taking

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the mean increase of the five years as a guide, and one in 86,000 in 1891. But it will have been noted that only from 37 to 44 per cent. of the cases are proved against the accused, so that the three ratios, if convictions only be considered, become one to 253,908, 270,931, and 232,246, respectively. There has been, no doubt, a considerable increase, though the proportion of convictions has fallen, as above stated. It is worth while to show the local distribution of this offence in the three years selected, along with the convictions and sentences of death. This is done in the following statement, taken from the Statistical Abstract.

MURDER CASES.

| PROVINCE. | 1880. | | | 1885. | | | 1891. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Cases Reported. | Convictions. | Persons Sentenced to Death. | Cases Reported. | Convictions. | Persons Sentenced to Death. | Cases Reported. | Convictions. | Persons Sentenced to Death. |
| Bengal | 295 | 100 | 70 | 376 | 74 | 31 | 397 | 107 | 41 |
| North-West Provinces | 371 | 177 | 99 | 460 | 176 | 102 | 545 | 224 | 123 |
| Panjab | 351 | 176 | 148 | 514 | 174 | 84 | 479 | 201 | 72 |
| Central Provinces | 81 | 33 | 28 | 127 | 39 | 21 | 123 | 66 | 47 |
| Assam | 33 | 12 | 4 | 36 | 10 | 4 | 21 | 4 | — |
| Madras | 285 | 130 | 102 | 308 | 103 | 35 | 459 | 124 | 40 |
| Bombay | 226 | 94 | 93 | 189 | 65 | 31 | 224 | 95 | 39 |
| Lower Burma | 102 | 48 | 49 | 185 | 49 | 62 | 157 | 55 | 34 |
| Upper Burma | — | — | — | — | — | — | 92 | 49 | 28 |
| Berar | 25 | 11 | 1 | 30 | 12 | 5 | 41 | 11 | 2 |
| Ajmer, Coorg, &c. | 10 | 2 | 2 | 9 | 3 | 5 | 8 | 4 | 1 |
| India | 1,779 | 783 | 596 | 2,234 | 705 | 380 | 2,546 | 940 | 427 |

The year 1885 is substituted for 1886, because the details by Provinces for the latter are not at hand. So far as reported cases are concerned, the North-West Provinces stand first, though in 1885 the Panjab outstripped them. But in convictions the latter fell below. Bengal and Madras come next, the latter showing superiority in the matter of convicted cases. Burma, considering its sparse population, comes very high in the list, both in the Upper and Lower Divisions. On comparing the return of convictions with that of capital sentences, it appears that in 1880, not counting Burma, where, as in 1885, more people were sentenced than convicted, 74 per cent. of those convicted were sentenced to death. By 1885, with the same deduction, the proportion had fallen to 48, and in 1891 to 43 per cent. The anomaly in the Burma return is not explained in the record, and it may possibly be due to sentences deferred from the previous year, though its recurrence is remarkable. Taking the three years together for India proper, the mean percentage of those sentenced to death is 55 on the number convicted of murder. This proportion is found in the Panjab. In the North-West Provinces it rises to 56, in Bombay to 64, and in the Central Provinces to 69. On the other hand, in Bengal it is 51, and 50 only in Madras. The return deals, it should be remembered, with sentences only, and, from a separate return, it appears that the order was finally carried out in 373 cases, or 85 per cent. of the former.

Dacoity.

The last of the offences in this class that we need consider is that of dacoity, or gang robbery. This, it may be explained, means, in the eye of the law, that five or more persons were concerned in the offence. Here, again, as in the case of cattle theft, we find two grades of operation. First, the fortuitous concurrence of the requisite number of men to rob a house or string of carts, and so on; and, secondly, the attacks of organised bands, often well armed, and under special leaders. The former generally break out in a season of scarcity or high prices of food, and the offences are probably isolated from each other, if, that is, the police are in an efficient state. The second and more serious form of gang robbery is more fitful in its prevalence, and the first essential to its success is an efficient leader, and the second, perhaps, the proximity of one, or better still, several, Native States, across the frontiers of which the band can effect its escape to a distance from the scene of its last exploit, trusting to the clashing of jurisdictions and the general apathy in such matters of the rural population, to get a fair law. In some cases, again, the occurrence of these outbreaks is due to the disturbed state of the country, and the presence of the requisite

requisite lawless element in the community as in Burma in 1886–89. We must put, however, the so-called dacoities of the last-named Province into a class by themselves. These occurrences, in fact, were not, correctly speaking, gang robberies at all, but part of a regular system of guerilla warfare that broke out under several influential members of the late king's military force, on the dispersal of the latter after the occupation of the country by the British troops. Similarly, in the Lower Division of the Province, the disturbances on the borders of the newly-acquired territory formed a favourable bed for the reception of the seeds of rebellion that were sedulously scattered by emissaries from across the frontier to the east and north. The origin and development of the movement were thus entirely political. The standard of revolt was actually raised in Shwegyin, one of the eastern districts, by a leader of a religious order, and a few successful raids on villages in the neighbourhood served to disseminate the spirit of unrest throughout the Province. Large bands under recognised leaders, ravaged a good part of the country, and were not put down without recourse to military aid. By the middle or end of 1887 all but two districts had been restored to tranquillity, and then began the sporadic outbreak of crimes, accompanied by violence, that really bore the character of the ordinary gang robbery. The gangs perpetrating these offences were small compared to those of the previous two years, of local origin, and relatively restricted operation. The suppression of these fell within the scope of ordinary police duties, and, after the experience gained against the more formidable opposition of the original armed bands, the civil force succeeded in reducing this class of crime to its normal limits. In Upper Burma, too, the military police disposed of most of the gangs with their leaders within three years of the outbreak. As regards the prevalence of gang robberies in the rest of India, the following table shows that in the eight years selected, the position in the list of the several Provinces is fairly maintained. It may as well be explained that between 1880 and 1884 the returns for Madras are not available, nor is there a general return for 1886.

Cases of Dacoity or Gang Robbery.

| Province. | 1880. | | 1884. | | 1885. | | 1887. | | 1888. | | 1889. | | 1890. | | 1891. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reported. | Convicted. | Reported. | Convicted. | Reported. | Convicted. | Reported. | Convicted. | Reported. | Convicted. | Reported. | Convicted. | Reported. | Convicted. | Reported. | Convicted. |
| Bengal | 175 | 36 | 225 | 32 | 241 | 37 | 131 | 24 | 132 | 34 | 172 | 31 | 130 | 26 | 254 | 52 |
| North-West Province | 103 | 39 | 95 | 27 | 66 | 15 | 123 | 36 | 122 | 47 | 135 | 45 | 233 | 67 | 160 | 65 |
| Panjab | 64 | 12 | 73 | 27 | 54 | 8 | 122 | 9 | 130 | 25 | 95 | 44 | 82 | 26 | 72 | 14 |
| Central Provinces | 36 | 27 | 32 | 19 | 20 | 3 | 23 | 3 | 25 | 9 | 28 | 12 | 42 | 21 | 25 | 15 |
| Assam | 4 | 0 | 15 | 6 | 10 | 1 | 13 | 1 | 7 | 4 | 6 | 1 | 4 | 0 | 8 | 0 |
| Madras | 297 | 91 | 337 | 31 | 235 | 55 | 203 | 32 | 247 | 52 | 240 | 48 | 200 | 68 | 652 | 77 |
| Bombay | 215 | 86 | 68 | 28 | 63 | 18 | 84 | 20 | 111 | 26 | 125 | 30 | 93 | 41 | 112 | 38 |
| Berar | 27 | 14 | 28 | 7 | 19 | 7 | 16 | 6 | 19 | 8 | 10 | 6 | 23 | 2 | 36 | 7 |
| Lower Burma | 45 | 23 | 94 | 27 | 124 | 28 | 1,524 | 374 | 695 | 177 | 332 | 363 | 181 | 90 | 137 | 47 |
| Upper Burma | – | – | – | – | – | – | * | * | 2,528 | * | 1,185 | | 213 | 56 | 150 | 62 |
| Coorg, &c. | 10 | 0 | 7 | 2 | 5 | 1 | 2 | 0 | 2 | 2 | – | – | 5 | 0 | 7 | 1 |
| India | 931 | 328 | 975 | 206 | 837 | 173 | 2,241 | 505 | 1,490* | 384 | 2,328 | 580 | 1,206 | 397 | 1,613 | 378 |

* Excluding the figures for Upper Burma, where military operations were in progress.

In point of numbers, gang robbery is far more frequent in Madras than in any other Province, and next to it comes Bengal. In the North-West Provinces this offence is committed to an extent that places the Province between Bengal and Bombay or the Panjab. But it appears from the details given in the annual returns that dacoity in the south is a very different affair, as a rule, from the crime with which the administration has to grapple in the North-Western and Central Provinces, or on the frontiers

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of Bengal. In Madras, when the offence is not committed by wandering gangs of foreigners from the north, or by a few members of the formerly predatory classes, both of whom are fairly well known to the police, it is traceable to casual bands of the lower orders of village menials, who have been driven to this expedient by a continuance of scarcity of grain, which last is sold, accordingly, at unusually high rates. Only one or two regularly organised bands are mentioned, and these are found mainly along the hill sides on the North-eastern coast. In a few cases the attack in question was proved to be merely the outcome of a feud between neighbouring wealthy proprietors, and, but for the opportunity taken by the myrmidons of the rival magnates to remove such valuables as came in their way during the operations, would have been more fitly classed as rioting. This last form of the so-called gang robbery is prevalent, too, in Bengal, where not only the landed interests are involved in disputes, but in one or two districts there seems also to have been a temporary strike against the indigo-planting industry, which was appeased, after some disturbance, by conciliatory measures on the part of the leading planters. In Behar, again, there have been one or two seasons in the last ten years that had the same effect on this form of crime as the corresponding circumstances in the South Deccan, and caused a marked increase in the number of attacks upon houses and travellers. The organised attempts to obtain possession of cattle that were being removed to the slaughter-houses of the larger towns, which have been so prominent since the close of the decade, had their precursor in a similar attack that took place in the Shahabad district in 1889, in connection with the propaganda of the Cow Protection Association. But the most serious forms of dacoity, in the true sense of the term, were those in Midnapore and on the eastern and northern frontier, where the offenders had behind them the protection of the swamps of the western delta, in the one case, and of the hills of Tipperah and Nepal, in the other. Fortunately, in both parts of the Province, the local leaders were caught after a season or two, and, as is usual in such circumstances, the followers resumed their position in society under a more reputable form of livelihood. Before passing to the returns for the North-West Provinces and its neighbour to the south, it is worth while to point out the distinction between Bengal and Madras and the other Provinces in respect to the character of what is returned as gang-robbery there, as indicated in the return of convictions for this offence. The mean ratio of convicted to reported cases, excluding Burma, where conviction for some years took place otherwise than in the courts of justice, was 24 per cent. during the eight years to which the return relates. In Bengal, however, it averaged but 17; in Madras but 18, and in Assam, which, in this, resembles Bengal, the percentage was 19. In the Central Provinces the dacoities are largely the work of organised bands, manned chiefly by members of the hill tribes of the neighbourhood under well-known leaders. During the decade the hero of these exploits was one Tatia, a Bhil by tribe, of whom there are tales of chivalry current from which he was in life dignified by such titles as the Indian Rob Roy or Robin Hood, though his end was less honourable than that of those worthies. The success of the police against these bands has been of late above the average, and they have secured the conviction of nearly half the cases sent for trial in the eight years. When we come to the North-West Provinces, we find that this offence, apart from mere riots accompanied by the forcible removal of property, has, on more than one occasion, broken out during the decade with exceptional violence, though happily, the closing years of the period in question have seen nearly the last of it in its more serious form. It appears that unless continuous supervision of a stringent character is maintained, there is present every element that is likely to ensure a brilliant, though probably a brief, career of successful outlawry. The criminal tribes indigenous to the Province are unusually numerous, though the density of the population around them obscures this fact. The population is agricultural to a remarkable extent, and, from the conditions of village life in India, distinctly timid of co-operation with any one outside their own community in extirpating a common evil. The Province is bordered on the north, west, and part of the south by native States, where, till a new departure was made last year on the side of the chiefs, the leaders

leaders of the bands of dacoits roamed at their will, full twenty times feared for once they were respected by the community at large, which was obnoxious to their vengeance in case of betrayal. From the Nipal tarai, still more from Gwalior, Dholpur, and the northern states of Bundelkhand, these leaders marked down their quarry and made their raid on it, only to disappear in the course of the night. The revival of these attacks began in 1884, and continued, with the help of the increased robberies of travellers and carts which followed the bad seasons of the intermediate period, till last year, when most of the leaders had been either killed or betrayed. In 1891–92 no less than three of the more renowned were disposed of in Central India, and the year before, a well-known Meerut freebooter also met his fate. The percentage of convictions on reported cases was 32·7, or about the same as in Bombay, where the dacoities were not, during the period under review at all events, of a like serious nature, though probably more truly gang robberies than their cognomen in Madras or Bengal. Speaking generally, the frequency of the ordinary raid of this sort, and certainly the continued immunity of the organised bands, is to a great extent due to the apathy of the villagers, or their aversion from giving timely information to the authorities, so that for months, and not only in the wilder parts of the country, a proclaimed offender will probably live on the fat of the land within a few miles of a strong police force in pursuit of him. Another feature in the case is the existence not only of the known criminal tribes, who are pretty well under surveillance, but of the classes that furnish, as a sort of traditional black-mail, the contingent of village watchmen and similar servants of the community, since in this class is to be found all the raw material for a successful dacoit, all that is wanted to make his qualities available in that capacity being a leader, an unsettled state of the country-side, and, necessarily, some slight relaxation in the administration of the police, or a decrease in that force either numerically or in efficiency.

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A few lines of comment are now required as to the forms of offence in which the police cannot act on their own responsibility, but upon warrant or summons issued by a magistrate. These constitute, as has been said above, some 44 per cent. of the reported crime of the year. The returns are so uniform, on the whole, that those for 1891–92 may serve as the groundwork for the following remarks. Out of some 562,300 cases, then, it appears that nearly a quarter are municipal prosecutions and nuisances under the Penal Code, other than those requiring urgent action through the police. Mischief, in its various forms, constitutes about 5 per cent. more. We then reach the large class of which insult, assault, and hurt are the principal members. Of these there are 45 per cent., so that for all other offences of this sort, forgery, perjury, cheating, and the like, some 25 per cent. remains. In this residuum, again, it seems that a not inconsiderable portion is taken up by disputes as regards marriage, a fertile source of dissension in Bengal, the North-West Provinces, and the Panjab, where these cases numbered about 4,000, 4,800, and 5,100, respectively. It is not worth while to spend much time over the more trivial offences, but the marginal statement serves to show the difference between the provinces in respect to the three principal charges brought, assault, hurt, and insult. The three are taken as a single aggregate, and on this is shown the relative frequency of each charge. It is needless to add that the figures bear but little relation to the results of the trial, if the case proceeds to that stage. First, then, it appears that the peaceful Burman contents himself, or perhaps we should add the other gender, with abuse to a far greater extent than the other races. Assault, it may be explained, technically means the show, not the use, of criminal force, and hurt, of the ordinary description here in question,

Minor offences.

| Province. | Percentage on the Sum of the Three Offences of | | |
|---|---|---|---|
| | Insult. | Assault. | Hurt. |
| Bengal | 5 | 72 | 23 |
| North-West Provinces | 3 | 24 | 73 |
| Panjab | 4 | 56 | 40 |
| Central Provinces | 5 | 65 | 30 |
| Assam | 5 | 80 | 15 |
| Madras | 9 | 65 | 26 |
| Bombay | 14 | 16 | 70 |
| Burma | 22 | 44 | 34 |
| India | 7 | 50 | 43 |

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question, is a step beyond assault. To this pitch the Burman does not often rise. On the other hand, the Bombay offender, being once roused, wastes little time in the exhibition of criminal force, but straightway advances to its application. It is much the same in the North-West, except that he seems to be more in the habit there of announcing that he is about to begin actual warfare. But in Madras and Bengal, still more markedly in Assam, abuse is accompanied by action, though the action seldom extends as far as contact with the adversary's person, or even to the projection of missiles with sufficient precision of aim to justify the more serious charge. It is curious, at first sight, to find the Panjabi below the average in causing hurt, but probably the issue of a quarrel amongst the rural or more turbulent communities of the frontier province more frequently finds its billet in the section of the charge-sheet that has been dealt with above.

Criminal Trials.

The next topic with which this chapter has to deal is the working of the Criminal Courts. The following table shows the number of persons under trial during the year 1891–92, which will serve to illustrate the matter in hand as well as a more extended survey :—

Number of Persons under Trial in the Year 1891–92.

| Province. | Village Courts. | Magistrates. | | | | | Sessions Courts. | High and Chief Courts. | Total. |
|---|---|---|---|---|---|---|---|---|---|
| | | Subordinate Courts. | | | | District and Divisional. | | | |
| | | Special. | Honorary. | Stipendiary. | Benches. | | | | |
| Bengal | – | 200 | 14,502 | 205,480 | 49,780 | 2,516 | 3,818 | 187 | 276,483 |
| North-West Provinces | – | 13,867 | 5,704 | 144,520 | 28,074 | 6,549 | 4,702 | 6 | 203,422 |
| Panjab | – | 3,400 | 17,073 | 146,422 | 14,737 | 8,190 | 1,227 | 161 | 191,210 |
| Central Provinces | – | – | 3,835 | 27,500 | 9,193 | 2,528 | 311 | – | 43,367 |
| Assam | – | 4 | 1,697 | 17,793 | – | 1,590 | 234 | 3 | 21,321 |
| Madras | 18,281 | 10,506 | – | 299,187 | 48,472 | 43,903 | 2,756 | 226 | 423,331 |
| Bombay | 4,268 | 11,705 | 18,586 | 163,119 | 9,922 | 26,642 | 2,203 | 142 | 236,587 |
| Berar | – | 3,951 | – | 14,634 | 1,496 | 626 | 292 | 16 | 21,015 |
| Ajmer | – | – | 3,123 | 4,590 | 41 | 438 | 188 | – | 8,380 |
| Coorg and Bangalore | – | – | – | 5,269 | 3,208 | 712 | 38 | – | 9,227 |
| Lower Burma | – | 133 | 9 | 52,416 | 10,188 | 4,212 | 1,054 | 43 | 68,055 |
| Upper Burma | – | 19 | – | 20,139 | 397 | 2,182 | 454 | 33 | 23,224 |
| India | 22,549 | 43,785 | 64,529 | 1,101,069 | 175,508 | 100,088 | 17,277 | 817 | 1,525,622 |

The above statement needs but little comment. The bulk of the original work is done by the stipendiary magistracy of the subordinate grades, and a good share of the rest is taken by the honorary and bench magistrates. The time of the superior courts is taken up to a great extent, as in the case of civil work, with the disposal of appeals and applications after trial, as well as with the duties of scrutiny and reference that have been referred to above.

If we consider the number, not of persons brought to trial, but of the cases a great difference will be found between that reported and that which makes its appearance on the court's record. A little was said above regarding the proportion of "true" cases, and it was mentioned that 16 per cent. of the charges made were struck off during the preliminary investigation. The proportion sent for trial falls to 71½ per cent. The provinces show astonishing variations in this respect. For instance, in Ajmer 87¾, and in Burma over 80, are thus forwarded, whilst in Assam only 45, and in the

the Panjab but 54½ reach the court. The average in Bengal is 60, whilst in the North-West Provinces the general mean is touched. Madras stands high, with nearly 90, helped, possibly, by arrears. But, on the whole, the work is nearly all got through punctually, as is proved in the marginal table, which gives the percentage of arrears on the total for trial. The general average is under 2 per cent., and this figure is not reached except in the Central Provinces, Madras, and Bengal. Considerable stress is laid on promptitude in the dispatch of magisterial work, and with the strict scrutiny of the periodical returns dealing with the subject, it is probable that the arrears shown at the end of the year, amounting in all to little more than 30,000 persons under trial, represent the usual proportion of remands for fresh witnesses or for the defence, and other incidents of an inquiry which it is the desire of the governments to reduce to a minimum.

| Province. | Percentage of Arrears. |
|---|---|
| Bengal | 2·3 |
| North-West Provinces | 1·4 |
| Panjab | 1·6 |
| Central Provinces | 3·7 |
| Madras | 2·2 |
| Bombay | 1·5 |
| India | 1·9 |

As to the disposal of the cases actually tried, the marginal table shows that in 1891 about half the persons tried were convicted, whereas, 10 years ago the proportion was 57½ per cent. In the latter year the ratio fell below half in Bombay, the Panjab, Ajmer, and Coorg. In 1891 the same result is found in the same number of provinces, but Berar has taken the place of Ajmer. The difference in some cases is very striking; the rise in Ajmer, for example, and the fall in Bombay and Coorg. The correspondence in the extent of the fall in such diverse parts of India as Assam, Madras, Berar, and the Central Provinces are as remarkable as the steadiness of the ratio in Bengal and the North-West Provinces. It is not easy to find for the change a cause that is likely to prevail over so wide a tract with such uniform consequences. The standard of evidence may have risen, or the inaccuracy of informants, or, again, the increased employment of legal advisers may have tended to reduce the chances of conviction, but none of these are distinctly set forth in the annual reviews of the provincial work, and, indeed, it is only in using large numbers at long intervals that the difference appears striking.

| Province. | Percentage of Persons Convicted* on those brought to Trial. | | Percentage Acquitted. | |
|---|---|---|---|---|
| | 1881. | 1891. | 1881. | 1891. |
| Bengal | 68·9 | 67·5 | 30·9 | 32·6 |
| North-West Provinces | 56·6 | 53·1 | 43·2 | 46·2 |
| Panjab | 48·8 | 41·8 | 51·0 | 58·1 |
| Central Provinces | 64·4 | 58·3 | 35·0 | 41·3 |
| Assam | 67·7 | 60·0 | 38·6 | 39·7 |
| Madras | 55·9 | 48·2 | 42·5 | 51·8 |
| Bombay | 49·4 | 39·9 | 50·6 | 60·0 |
| Berar | 52·6 | 45·8 | 46·8 | 53·9 |
| Ajmer | 44·1 | 59·9 | 55·4 | 39·8 |
| Coorg | 42·1 | 26·6 | 57·8 | 73·1 |
| Lower Burma | 66·8 | 61·7 | 32·7 | 38·2 |
| Upper Burma | – | 67·2 | – | 31·8 |
| India | 57·5 | 51·6 | 41·9 | 48·2 |

* Including those committed or referred to other tribunals.

Appeals.

The appellate work does not help in the solution of the above question, for, though there is a tendency for the number of appeals to rise in the provinces where the ratio of convictions is highest, as is necessarily the case, other things being equal, it is not invariably so, and the marginal table shows that in the Panjab, where the convictions are less than half the number of accused, the proportion of appeals is the same as in the North-West Provinces, where the former ratio is 53 per cent.; and here, in turn, the appellants are relatively more than in Bengal, where over 67 per cent. are convicted. The highest proportions are found in Burma, where, indeed, as we have seen above, the ratio of convictions is high, but where, as the following table will show, the applications after judgment meet with less response, in the

| Province. | Percentage of Appellants on Persons brought to Trial. |
|---|---|
| Bengal | 10·6 |
| North-West Provinces | 13·8 |
| Panjab | 13·5 |
| Central Provinces | 11·2 |
| Assam | 9·5 |
| Madras | 5·4 |
| Bombay | 4·0 |
| Berar | 5·9 |
| Lower Burma | 21·1 |
| Upper Burma | 36·1 |
| India | 9·6 |

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sense that the appellants understand the term, than in any other part of the country :—

| PROVINCE. | Percentage on Appeals or Applications for Revision. | | | | | |
|---|---|---|---|---|---|---|
| | Applications Rejected, &c. | | Decisions Confirmed. | | Decisions Reversed. | |
| | 1881. | 1891. | 1881. | 1891. | 1881. | 1891. |
| Bengal | 24·7 | 37·6 | 38·6 | 40·1 | 20·01 | 16·3 |
| North-West Provinces | 36·7 | 36·1 | 36·7 | 53·1 | 13·0 | 14·1 |
| Punjab | 37·0 | 46·4 | 28·2 | 22·5 | 20·3 | 16·7 |
| Central Provinces | 28·1 | 31·9 | 30·4 | 42·7 | 21·4 | 12·7 |
| Assam | 30·7 | 38·8 | 33·5 | 56·2 | 16·5 | 18·0 |
| Madras | 13·1 | 18·6 | 40·5 | 42·3 | 25·2 | 21·8 |
| Bombay | 16·1 | 29·1 | 47·1 | 45·3 | 18·3 | 17·3 |
| Berar | 15·4 | 39·1 | 29·1 | 31·1 | 30·7 | 23·1 |
| Ajmer | — | 35·8 | 75·0 | 41·3 | 12·5 | 6·3 |
| Coorg | 3·1 | 4·0 | 48·4 | 55·3 | 39·1 | 30·2 |
| Lower Burma | 18·3 | 24·0 | 41·7 | 58·5 | 21·8 | 7·6 |
| Upper Burma | — | 12·3 | — | 70·5 | — | 7·2 |
| INDIA | 27·6 | 32·5 | 37·0 | 43·9 | 18·9 | 15·4 |

On the whole, about 15·4 per cent. of the decisions taken up on appeal are reversed, and nearly 44 per cent. confirmed. The power of rejection on the face of the record is recognised in 32 per cent. of the cases. The rest are otherwise dealt with, or were not disposed of at the end of the years in question. In the year 1881 it will be seen the percentage of rejections was less, and that of reversals higher. The provincial details give the highest proportion of reversals in 1881 to Coorg and Berar, and Ajmer and the North-West Provinces stand at the top of the list. Ten years later Ajmer is still in the same position, but Burma is its neighbour, and the Central Provinces are ahead of the North-West. The highest proportion falls again to Coorg and Berar. These two, with Madras, are the only items that advance far above the general mean, and it was much the same in 1881. The power of rejection was exercised most frequently in that year in the Panjab, with the North-West Provinces very near it in this respect. In 1891 the same province is ahead, but the second place is taken by Berar, and Assam and Bengal are both in advance of the North-West. Taking the proportionate number of appeals lodged with that of the rejected, the Panjabi seem to trouble the courts with the least reason, though the Burman, owing perhaps to a different judicial system, gets least out of his motion. It is not necessary to go further into the working of the courts than this for the purposes of the present review. The actual figures on which the above tables are based will be found in the Statistical Abstracts for the years in question.

Sentences.

There remains the question of the sentences passed on conviction. The description given above of the relatively high preponderance of what may reasonably be termed trivial offences in the charge-sheets with which the courts have to deal indicates with sufficient clearness the light nature of the punishments that, as a rule, fulfil the requirements of justice. The following table gives the percentages of each class of sentence for the year 1891,

1891, and on comparing it with the roll for 1881 and 1886, the variations will be seen to be practically insignificant. CRIME AND CRIMINAL JUSTICE.

| PROVINCE. | Percentage on Total Convicted and Sentenced to | | | | | Percentage on Total Imprisoned. | | | | Percentage of Fines | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Death. | Transportation. | Imprisonment. | Fine. | Whipping. | Under Fifteen Days. | Fifteen Days to Six Months. | Six Months to Two Years. | Over Two Years. | Realised on those Imposed. | Paid in Compensation on those realised. |
| Bengal | 0·02 | 0·14 | 17·88 | 81·07 | 0·89 | 16·87 | 59·89 | 19·72 | 3·52 | 87·21 | 5·73 |
| North-West Provinces | 0·09 | 0·43 | 34·29 | 58·82 | 6·37 | 22·93 | 50·13 | 23·72 | 3·22 | 76·72 | 8·06 |
| Punjab | 0·09 | 0·21 | 25·24 | 71·93 | 2·53 | 12·60 | 49·67 | 32·69 | 5·04 | 75·73 | 11·01 |
| Central Provinces | 0·19 | 0·19 | 32·64 | 60·19 | 6·79 | 3·23 | 76·05 | 17·69 | 2·53 | 90·89 | 7·76 |
| Assam | — | 0·14 | 29·16 | 67·78 | 2·92 | 29·95 | 56·70 | 12·14 | 1·21 | 93·22 | 15·42 |
| Madras | 0·02 | 0·09 | 17·26 | 81·96 | 0·67 | 29·09 | 60·83 | 7·57 | 2·51 | 77·12 | 3·88 |
| Bombay | 0·04 | 0·18 | 19·47 | 79·52 | 0·79 | 30·00 | 54·58 | 12·18 | 3·24 | 79·34 | 7·94 |
| Berar | 0·02 | 0·43 | 15·33 | 80·66 | 3·56 | 12·64 | 54·17 | 20·63 | 12·56 | 84·48 | 6·00 |
| Burma | 0·14 | 0·96 | 28·91 | 63·83 | 6·16 | 7·39 | 48·83 | 34·59 | 9·19 | 81·38 | 8·16 |
| India, 1891 | 0·06 | 0·24 | 22·73 | 74·42 | 2·55 | 20·16 | 55·27 | 20·63 | 3·89 | 80·86 | 7·34 |
| „ 1886 | 0·05 | 0·39 | 22·72 | 74·75 | 2·05 | 20·91 | 57·82 | 17·15 | 4·12 | 79·95 | 9·02 |
| „ 1881 | 0·08 | 0·21 | 22·66 | 73·52 | 3·53 | 27·61 | 51·14 | 17·84 | 3·41 | 80·43 | 8·30 |

Sentences of death have gone down a little, as has been already mentioned, in favour of those for transportation. Imprisonment is almost stationary, and fines have slightly increased. Powers of sentencing to whipping were modified to some extent during the decade, a fact which probably accounts for the decrease in the relative number of sentences under that head. Three-fourths of the sentences are those of fine, and the rapid growth of prosecutions for nuisance and offences against municipal law, apart from the number of trivial charges of insult and assault, contributes to this result. It appears that fines are more numerous, compared to the total number of sentences, amongst the peaceful but loquacious populations of Bengal and Madras, whilst the North-West and Central Provinces, followed closely by Burma, show the largest proportions of severe sentences. Short terms of imprisonment are most in vogue in Bombay, Madras, and Assam. In Burma, Berar, and the Panjab they are at a discount, and in the Central Provinces, they only just outnumber the longest sentences. On the other hand, the last-named Province takes the first place in point of sentences within the power of what are known as the second and third-class magistrates, that is, from a fortnight to six months, which jurisdiction includes, as the statement given in a former section shows, the greater part of the magisterial work of the country. The column relating to the payment of compensation in the table under discussion, shows that the provisions of the new law extending the power of awarding compensation in the case of complaints found to be without foundation have not yet taken effect, and, indeed, this point is specially noted in at least one of the provincial reviews. It does not seem, however, that the system of awarding amends in this way follows the record of rejections, acquittals, or discharges, except, perhaps, in Assam. A point of detail which it has not been thought worth while to work out provincially may be here mentioned, namely, the proportion of fines of less than 10 rupees inflicted. For the whole of India this was 67·7 in 1881; in 1886 it had arisen to 89·3, and in 1891 there was a retrocession to 87·9. Thus, in the last-named year, only 12 persons in every hundred of those fined were sentenced to pay more than Rx. 1; or, referring to the total number of persons convicted, about 9 per cent. were punished to the above extent, against $8\frac{1}{2}$ similarly mulcted 10 years ago.

To summarise the working of the system of detecting or preventing crime and of administering justice in the present day is a task beyond the scope of this review. In general outline it has been shown above how the statistics fail in several very important points to represent the true facts. General remarks on crime during the decade.

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facts. The classification of trivial and serious offences under a single technical definition is but one of these defects. Another possibly misleading feature is the increase in the number of reported cases, of which the diminishing proportion of convictions is but a slight corrective. The multiplication of police stations, together, perhaps, with some little improvement in the quality of the officers in charge thereof, and the better organisation of the village police in some parts of India has probably materially helped in the increase of the number of cases brought to notice in the returns which were formerly either not recorded, because there seemed no chance of their discovery, or simply because they never came to the ears of the police at all. But there is still much that passes entirely outside official action. In Bengal, for instance, a few years ago it was re-stated by the local authorities that a very large proportion of the serious crime of the province goes unpunished, and still more is undetected. To a less extent this is probably true of many other parts of India, and it seems generally accepted that of late years there has been a tendency for both crime and the difficulty of conviction to increase. It must be recollected that the population, however law-abiding in the main, is a vast one, so that a numerous army of police is required to serve the ends of justice throughout the country. The supply of efficient agency is by no means unlimited, and the salaries of this army is now a matter for serious consideration. The village watchmen, who stands at the base of the police arrangements, is but an irregular workman, and, when not himself a member, past or present, of one of the criminal fraternities of the neighbourhood, is under the authority of the leaders of public opinion in the village: and public opinion in India is an apathetic, if not an adverse, influence in the investigation of local crime. The chief landlord of the place, who was formerly one of the first persons to be informed of the occurrence of any serious crime, is now losing, it is said, his influence, and the police have to work on such evidence as they can themselves procure, and, rightly or wrongly, they are an unpopular body. Then, again, they have in India to deal with numerous communities of hereditary as well as habitual offenders, men whose caste or tribe is traditionally addicted to offences against property. The supervision of these bands forms, in many provinces, no inconsiderable portion of the labours of the police force. In recent years the practice of demanding security for good behaviour from the known leaders of the communities in question, as well as of registering the families or settling them on lands in certain tracts, has had its effect, though more stringent measures seem necessary, and are under contemplation. As regards the action of the courts, too, a good deal has been said of late. The advance of the administration, as a whole, carries with it, no doubt, an increasing tendency to insist upon the evidence produced against the accused being of a quality that upholds legal certainty of guilt, as distinguished from that minor degree of conviction that is generally quoted as moral certainty. This, no doubt, places the accused at a distinct advantage, especially as he can now usually secure the aid of a professional adviser; whereas the police, if left to themselves to prosecute their charge, have neither the training of a lawyer nor any sympathy with the system of law to which they have to minister. The criminal law in force in India, it has been pointed out, is not in any way a local growth, but is based on notions evolved in totally different circumstances by a different race of people, whose object invariably was to protect the subject against his ruler; the whole system connoting public sympathy with equity and the desire to have justice done. This is by no means the case in India, and it is no wonder that amongst the people at large who have had experience of the working of this branch of the law, the impression is that the provisions unduly favour the chance of escape of a person who is really guilty. This, too, is quite apart from the different appraisement of crime in India, when compared with England, so that, in the former country, the Penal Code may be said to hold up, in some respects, the ideal of what ought to be, not what is, considered to be crime. The regard for technical excellence in the record of an inquiry is carried, again, a step higher, in connection with the appellate work of the courts, so that the reviews point out that it is a too common fault of the

the native magistrates who preside over the lower courts to pass a decision with the fear of reversal before their eye, and to acquit, accordingly, in all but the very simplest or plainest cases. The tendency is also mentioned of the same class of officer to draw no distinction between the functions of the court in a magisterial inquiry, where it is the duty of the trying officer "to satisfy himself before acquittal for want of evidence that the sources of evidence have been exhausted, and to take all reasonable precaution that guilt does not go unpunished," and those he has to perform in a civil suit, where he has merely "to hold the balance between the two litigating parties." Finally, it is alleged that this class of magistrate is too prone to pass unduly lenient sentences. It has been seen above that most of the magisterial work of the year, excluding that done by benches and honorary magistrates, who are of the same class, passes through the hands of the subordinate stipendiary magistracy, and in the third chapter of this review it was explained that all but a small fraction of the Provincial Service was recruited from this class. The Government of India has therefore pointed out that the remedy for unsatisfactory working in the respects mentioned above, lies in strict supervision by the superior officer, both as regards the character of the disposal of the work and its promptitude.

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## THE FINANCES OF LAW AND JUSTICE.

The Finances of Law and Justice.

To conclude this chapter a brief statement is given of the receipts and charges that appear in the general accounts under the head of "Law and Justice," subtracting from them the items that relate to Jails and their administration. It is also worth while to add in the statement the amount received on account of Court fee stamps, deducting the discount to vendors. It will be seen that both the receipts and the charges have been rising, the one continuously, the other nearly so, during the eleven years specified.

| Year. | Receipts. | | | Charges. | Surplus. |
|---|---|---|---|---|---|
| | Departmental. | Court Fee Stamps (net). | Total. | | |
| | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1881-82 | 355,001 | 2,278,220 | 2,633,221 | 2,396,633 | 236,588 |
| 1882-83 | 309,591 | 2,277,381 | 2,586,972 | 2,442,177 | 144,795 |
| 1883-84 | 293,055 | 2,391,269 | 2,684,324 | 2,477,103 | 207,221 |
| 1884-85 | 272,410 | 2,461,759 | 2,734,169 | 2,542,071 | 192,098 |
| 1885-86 | 277,872 | 2,484,585 | 2,762,457 | 2,602,370 | 160,087 |
| 1886-87 | 287,550 | 2,565,120 | 2,852,670 | 2,595,353 | 257,317 |
| 1887-88 | 305,147 | 2,623,121 | 2,928,268 | 2,651,051 | 277,217 |
| 1888-89 | 336,307 | 2,625,405 | 2,961,712 | 2,694,252 | 267,460 |
| 1889-90 | 353,804 | 2,734,433 | 3,088,237 | 2,716,275 | 371,962 |
| 1890-91 | 355,522 | 2,691,058 | 3,046,580 | 2,759,431 | 287,149 |
| 1891-92 | 325,843 | 2,861,462 | 3,187,305 | 2,840,007 | 347,298 |

It is clearer, also, to show the items that are summarised above, along with the provincial details. As there is no object in doing this for more than a single year, the table given on next page contains the returns for 1891-92 only. It does not appear to require comment.

## RECEIPTS, 1891–92.

| HEADS. | INDIA. | BENGAL. | NORTH-WEST PROVINCES AND OUDH. | PANJAB. | CENTRAL PROVINCES. | ASSAM. | MADRAS. | BOMBAY. | SMALLER PROVINCES. | UPPER BURMA. | LOWER BURMA. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Sale-proceeds of Unclaimed Property, &c. | 18,654 | 2,324 | 1,814 | 1,277 | 1,563 | 928 | 1,725 | 2,805 | 3,820 | 1,316 | 1,082 |
| Court Fees realised in Cash - - - | 31,211 | 2,632 | 22,556 | 736 | 1,259 | 258 | 2,412 | 1,212 | 105 | 30 | 11 |
| General Fees, Fines, and Forfeitures - | 309,081 | 79,809 | 28,601 | 40,126 | 10,090 | 8,456 | 58,956 | 31,548 | 4,506 | 13,122 | 33,867 |
| Pleadership Examination Fees - - | 5,558 | 2,119 | 630 | — | 66 | 88 | 1,801 | 19 | — | 835 | — |
| *Miscellaneous Fees and Fines:* | | | | | | | | | | | |
| Record Room Receipts - - - | 4,873 | — | 91 | 1,588 | — | — | — | 3,194 | — | — | — |
| Other Receipts - - - - - | 1,080 | — | 1 | 39 | 281 | 49 | 199 | 401 | — | 45 | 65 |
| Miscellaneous - - - - - | 5,386 | 1,217 | 782 | 270 | 372 | — | 589 | 1,494 | 3 | 379 | 280 |
| TOTAL - - - | 375,843 | 88,101 | 54,475 | 44,036 | 13,631 | 9,779 | 65,682 | 40,673 | 8,434 | 15,727 | 35,305 |

## CHARGES, 1891–92.

| HEADS. | INDIA. | BENGAL. | NORTH-WEST PROVINCES AND OUDH. | PANJAB. | CENTRAL PROVINCES. | ASSAM. | MADRAS. | BOMBAY. | SMALLER PROVINCES. | UPPER BURMA. | LOWER BURMA. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SALARIES, ESTABLISHMENTS, AND CONTINGENCIES OF: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| High Courts - - - - - - | 271,708 | 114,130 | 37,417 | — | — | — | 54,732 | 65,429 | — | — | — |
| Chief Court - - - - - - | 30,584 | — | — | 30,584 | — | — | — | — | — | — | — |
| Judicial Commissioners - - - | 34,741 | — | 12,787 | — | 6,500 | 130 | — | 4,251 | 415 | 4,888 | 5,770 |
| Recorder - - - - - - | 6,727 | — | — | — | — | — | — | — | — | — | 6,727 |
| Law Officers - - - - - | 87,797 | 31,524 | 12,542 | 6,690 | 365 | 427 | 12,711 | 18,236 | 358 | 350 | 4,594 |
| Administrators General - - - | 420 | — | — | — | — | — | 120 | 300 | — | — | — |
| Civil and Sessions Courts - - | 1,250,681 | 435,927 | 229,989 | 116,696 | 3,924 | 18,338 | 239,957 | 188,287 | 8,035 | 1,628 | 7,900 |
| Criminal Courts - - - - | 1,008,607 | 224,423 | 158,073 | 132,621 | 60,137 | 35,309 | 100,172 | 125,920 | 17,398 | 70,917 | 83,637 |
| Coroner's Courts - - - - | 2,700 | 1,436 | — | — | — | — | — | 1,264 | — | — | — |
| Presidency Magistrates - - - | 19,874 | 7,043 | — | — | — | — | 5,044 | 7,787 | — | — | — |
| Courts of Small Causes - - - | 70,906 | 20,137 | 6,624 | 3,908 | 3,410 | — | 8,705 | 23,777 | 581 | — | 3,764 |
| PLEADERSHIP EXAMINATION CHARGES. | 2,518 | 782 | 617 | — | 3 | 10 | 1,046 | — | — | 60 | — |
| REFUNDS - - - - - - | 51,828 | 12,876 | 3,551 | 6,423 | 1,076 | 644 | 7,959 | 4,223 | 985 | 4,009 | 10,082 |
| TOTAL - - - | 2,839,091 | 848,278 | 461,600 | 296,922 | 75,415 | 54,858 | 430,446 | 439,474 | 27,772 | 81,852 | 122,474 |

Charges in England:

| | £. |
|---|---|
| Passage and outfit allowance of a Judge of the High Court of the North-West Provinces | 300 |
| Salary of Privy Council Reporter under arrangement made by Government of India, &c. | 180 |
| Tea-drier for Port Blair, Convict Settlement, &c. - - - - - - - - - - | 159 |
| TOTAL - - - - - | £639 |

## CHAPTER VII.

## POLICE AND PRISONS.

Police and Prisons.

The working of the Police system is a subject so intimately bound up with that of the prevalence and detection of crime and the results of judicial inquiry into criminal charges, that nearly all that need be said about it in a general view like the present has been included in the preceding chapter. It is therefore proposed to treat now mainly of the organisation and distribution of the different sections of the force, matters which have been the subject of considerable discussion within the period to which this review relates.

Setting on one side the special branches of police engaged in harbours, under municipalities, and on railways, where separately organised, the two main classes which have to be considered are those of the village or rural police, and the district or regular, force. The latter is subdivided, again, in Assam and Burma, into the civil and the military sections, and in the West of India, too, there are special corps under a semi-military organisation. It is the creation of the British administration, whereas the village system, in some form or other, prevailed throughout the more settled parts of India when they were still under native or Musalman rule.

Village police.

Under the system of delegation of authority that was usual under those régimes, the power of revenue collection carried with it to a great extent that of dealing with local crime within the circle of the delegate's administration. The village, which was the unit of revenue responsibility, except in the semi-populated tracts, such as Bengal, was also answerable for crime within its boundaries. The headman was assisted in preventing or detecting offences by a watchman, who was and is, as we have seen in the last chapter, very often a member of the tribe to whom the bulk of the local crime could be traced. His position in the village community was recognised as a sort of blackmail, or a guarantee that the crops of those who entertained him should be unmolested by his comrades from other parts of the district. The extent of the responsibility of the village as a whole for crimes traceable to it, varied in different parts of India. The most simple and comprehensive system of enforcing the principle in question was that of the Marathas and possibly their predecessors in power in the west of India, according to which, the village to which the footsteps of an offender were traced by the watchman of the place where the offence had been committed was bound to make good the compensation settled by custom, provided always that it could not carry on the trail to another village. Whether this last feat was duly accomplished or not, was left to the watchmen of the two places concerned to decide. The plan above described has long fallen into disuse in British territory, though tracking is in some places efficiently conducted. The headman and the watchman, however, have still important functions to fulfil in respect to offences against the criminal law. The former is bound to do what he can to prevent such occurrences, the latter to detect them, and in any case to give information to the regular police at the nearest station without delay. But here, as a rule, their function ends, and the distinction between them and the district agency is sharply drawn. Whilst recognising that the two systems cannot be completely co-ordinated, the Government of India and the Local authorities have, of late years, been taking steps to secure a greater degree of harmony in working, and, whilst maintaining the local character of the village system, to increase its efficiency without turning the watchman into an ill-paid subordinate of the district police. In many parts of the country, for instance, the watchman is paid by the grant of a plot of the village land, a method of remuneration which it is sought to replace by a regular cash payment, wherever the change can be affected without seriously disorganising the communal system. In the North-West Provinces, for instance, where both are in force, the cash-payment is well established, but in Oudh it has been introduced only since 1892, and has been still more popularised in both areas by the provision of funds for "good conduct allowances" to be used in rewarding watchmen who have distinguished themselves by special efficiency. In Bengal, where the system was till recently decidedly inefficient, an Act of the Local Legislature, passed in 1892 has remedied some of the more flagrant defects of the former use of this agency

Police and Prisons.

agency. The object of the enactment was to bring the village police into closer relations with the executive authority, whilst taking full advantage of the local knowledge obtained by this class of agency. The watchmen were, under the former Act, appointed by the village "Panchaiat" or assembly of notables, which also settled the number required for local purposes. Now, however, the nominations have to be approved by the District Magistrate, who will also fix their number and salaries. It is thus possible to obtain the services of men of a better class than the less ambitious or successful of the criminal community. Owing to his direct appointment by the District Officer, again, it is hoped that the watchman will be raised in the estimation of the regular police, who are said to be too prone to regard him as a menial assigned for their service when on tour. In Bombay, where the former system, the leading feature of which has been already described above, had been widely fostered by the prevalence of the predatory classes, the village watchman is usually remunerated by a grant of land, and in spite of the curtailment of his functions by the abolition of the compensation system of disposing of criminal complaints, the grant is still held in its integrity. Alterations in the system are therefore under the consideration of the Local Government, by which the utility of this member of the community may be extended, as in Bengal, without placing him outside the authority of the headman and under that of the district police. Finally, in Lower Burma, the authority of the village headman was materially strengthened by Act III. of 1892, which assimilated the practice to that introduced into the upper division of the Province by Regulation. In 1887 some of the powers grantable under the local Village Police Act in Bombay were conferred thereby upon selected headmen, and the powers of the district officers were widened in the manner adopted on the Panjab Frontier, where similar conditions had been found to prevail.

We may now pass on to the consideration of the district police.

District police.

This force originated in 1792, when Lord Cornwallis took upon the British Government in Bengal the duties of administering justice, which, since the assignment of the revenue functions to the East India Company in 1765, had remained, though only in name, with the Nawab Nazim of Murshidabad. Just as in the case of a village, the responsibilities had been vested in the headman, so in that of the Revenue assignees of a larger tract, the zamindar was bound to help in every way the Government which had granted him the right of collection; so he was answerable for the preservation of peace within his jurisdiction. This duty was taken from him in the year above mentioned, and imposed on the District Officer. Each district was subdivided into police circles, under a native Superintendent, who, with his subordinates, arrested offenders and sent them for trial to the Magistrate. The same system was introduced into the North-West Provinces. In Madras, the village system, which had been at first superseded by the introduction of that copied from Bengal, was re-introduced after 15 years or so of the other plan. The headman arrested criminals and sent them, not to the Magistrate, but to the Tahsildar, or subdivisional officer, in the first instance, he being the chief police authority in that tract, subordinate, of course, to the general authority of the Magistrate of the district. In Bombay the same system was adopted, with the difference that the supreme criminal court had the general supervision, not the executive. As the complexities of administration increased, the police duties grew beyond the powers of the magistrates. Outside the Presidency towns, the separation was first effected by that stalwart reformer Sir Charles Napier, who took as his model the Royal Irish Constabulary, and introduced into the police battalions some elements of military discipline. His initiative was followed, not only in Bombay but in the Panjab, on its annexation in 1849, and, in the latter with still more regard for the military side of the organisation. Madras was awakened to the need of re-organisation by the disclosures of a Special Commission, and a new police department was formed in 1858, again on the Irish pattern. Three years later, a general Police Act was passed for Bengal and Northern India on the same lines. Special Police Acts have also been passed by the Presidency Legislatures for both Madras and Bombay; for the former, in 1859, and for the latter in 1867, amended in 1890. In all Provinces the police are under the supervision of an Inspector General, and now form a separate department of the administration. Bombay was the last Province to appoint the above named officer, as, up to 1885, the police were subordinate to the Divisional Commissioners. The Inspector General

General is the departmental head, but so far as regards the disposition of the force within the district and its working in respect to crime and conduct of criminal charges, the chief authority still rests with the Magistrate of the district. In all provinces the whole force is put through a course of drill and military discipline, either at special institutions or by the district Superintendent and his Assistant. These officers are usually, if not invariably, Europeans, and below them come the Inspectors and other graded officers, who are to a like degree natives of India. It is not necessary to enter into further detail regarding the hierarchy, if the term be allowed, of the police force. In Burma and Assam, as was remarked above, the conditions require a greater predominance of military training than of skill in detection or conduct of cases before a tribunal. Here, accordingly, we find both civil and military sections of the force. In Assam the latter are chiefly locally employed in the hill tracts and on the frontiers. In Upper Burma, since the outbreak of dacoity in 1886 and the following years, the military police have been widely posted throughout the country. In Lower Burma, too, under a scheme sanctioned within the last two years, the police are divided into two forces, civil and military, of which the latter is numerically the weaker, and is subdivided in turn into two battalions, each under an adjutant. Both, however, are equally subordinate to the Magistrate of the district in which they are posted. It may be observed that the civil police, instead of being composed of both natives of Burma and Indians, as heretofore, is to be restricted, under the new scheme, to the former, whilst the military bodies are to be recruited solely from amongst the martial communities of the North of India. The former plan of mixing the two races in civil work was found to have a tendency to bring the Indian into all the station work, leaving the outlying villages to the Burman, who was thus away from the supervision that he required more than the other. Then, again, the authorities found that far too much of the detective work was falling into the hands of the foreign agency, which, from ignorance of the language and the people, was unable to cope with it. The efficiency of the force was thus falling off, hence the change in its constitution.

Police and Prisons.

This digression has been made to indicate the peculiar difficulties that attend the thorough organisation of the police in an Indian province. Within the last half of the decade under review, and even within the last two or three years of that period, the condition of the police has been materially improved. In 1886 the attention of the Government of India was drawn to the desirability of examining the organisation of the police force in the several Presidencies and Provinces, with a view to rendering it a more efficient instrument to repress local disturbances, such as from time to time occur, especially during the celebration of religious ceremonies and observances, of which, moreover, as has been mentioned in the preceding chapter, an unusual number of those appertaining to the Musalman and the Brahmanic faith respectively have, since 1885, been taking place simultaneously. At the time of the appointment of Police Commissioners in 1860, and in the course of the subsequent inquiries and re-organisations that took place, the principle was recognised that the functions of a civil police were to protect the community against all the criminal classes, and to put down riots and all local disturbances. It was further provided that the police should be so far drilled and disciplined as to enable them to deal with large crowds of non-military persons; that they should carry arms where there was a chance of their often having to deal with armed or desperate men, or when the carrying arms was necessitated by any peculiar duty, such as escort duty, guarding treasuries and jails, and the like, but that they should otherwise carry a truncheon only. As regards the strength of the police force, it was laid down that it should be no stronger than was needed for purely police purposes, a reserve being maintained at some headquarters to be available against sudden local outbreaks. It has been seen from what has been recorded in the preceding chapter, that experience generally has shown that in some parts of India at least, the district force is by no means as efficient as it ought to be for several of the purposes mentioned above. After consultation with the local Governments and Administrations, therefore, the Government of India insisted that the principles laid down in 1860 should be strictly observed, and that the state of efficiency implied in the instructions then issued should be kept up. It was also enjoined upon the local authorities that a sufficient reserve should be maintained in every district, if possible, but at all events at convenient centres, to put down all riots and local

Recent police reforms.

POLICE AND PRISONS.

disturbances, and in a fit state of preparation to be concentrated for extraordinary emergencies. As the reserve in question is part of the district force, it is to be still available for escort duty, and is useful, too, in training recruits, all of whom are, as far as possible, to pass through it, and be capable of serving in it whenever occasion requires. The ordinary district reserve is to be armed with breech-loading Sniders, converted into smooth bores, whilst the special reserves, which are called upon to perform duties of a semi-military nature, are armed with the Snider unconverted. Such reserves are posted in the Malabar and north-eastern coast districts of the Madras Presidency, where riots have occurrred from time to time, and at Dumka, near the Santhal Hills, at Dacca and at Bhagalpur, in Bengal, for the same reason. There are also similar provisions in case of emergency in six districts of the Central Provinces.

A still more important step was taken in the years 1888–90 with reference to the general improvement of the police force, irrespective of its efficiency in repressing disturbance. It had been noticed that there was a tendency for certain classes of serious crime to increase in various parts of the country, and that greater difficulty was experienced than before in bringing the offenders to justice. It is unnecessary to go over the ground already traversed in the last chapter, but in the course of the inquiry specially made on this subject, it became very clear that what with the general rise in the standard of administration by native agency, the spread of education amongst the middle classes, the increased cost of living, and similar influences, the position of the police force was getting lowered, and that service in it was by no means attractive to men of the required capacity, whilst, on the other hand, offenders were reaping the benefit not only of railways and telegraph lines, but of the greater abundance of cheap professional aid, and of the higher standard of proof required by the courts in which the police had to produce their case. For all or most of the above reasons, the police were falling in public estimation, and recruits of the right sort did not come forward as of yore. It was necessary, accordingly, to improve the general position of the upper grades of the force, and to raise the pay of the rank and file wherever it was found that the remuneration was far below the equivalent of the grave responsibilities that have to be occasionally incurred by this class. In the various Provinces schemes have since been considered, and in most of the larger ones the reforms proposed have been sanctioned by the Secretary of State. The improvement that seemed most urgent was that in the grade of official employed in the investigation of alleged offences, who, with the Inspectors specially deputed to take cases through the magisterial court, has, in most cases, received a substantial rise in position and salary. The grade of officer to be placed in charge of a Station-house, again, has been raised by the grant of a liberal charge-allowance, and additions on the same lines have been made in various ways to the pay of the constables. Amongst other changes in the Panjab and Central Provinces, a specially deserving and competent Inspector is now allowed to pass into the Executive service, as an Extra Assistant Commissioner, or Deputy Magistrate. The financial result of all these reforms has not been to largely increase the cost of the police force, except in the North-West Provinces, where the question was very thoroughly sifted by a special Commission, and it was found that effective reforms could not be carried out without the addition of Rx. 84,670 to the annual charge. The proposals having been accepted by the Government of India, a special grant was made from Imperial funds, of Rx. 50,000 a year for five years, to start the new system. In Madras the proposed changes were estimated to cost an additional Rx. 3 300 only; in the Central Provinces, Rx. 8,890; whilst in Lower Burma the radical changes above mentioned result in a saving of Rx. 5,000. The proposals regarding the rest of the provinces are still under consideration. There are other questions connected with the more efficient control of crime, too, which are about to be dealt with by the Government of India. Some of them have been mentioned cursorily in the course of the last chapter. The control of habitual criminals, for instance, is a matter which extends at the present time far beyond the mere supervision of the ordinary or registered criminal tribes. The conduct of prosecutions before the magisterial courts, again, has assumed grave importance, and is found to require a competent knowledge of the forensic aspect of the law as it is now administered in India, so it is under contemplation to appoint to this duty, in cases where the Public Prosecutor is not available, such police officials only as have shown themselves to possess the necessary

necessary qualifications by passing the test of the Pleaders' examination, so far as it relates to this branch of the law. POLICE AND PRISONS.

The statistics regarding the police are to be found in the usual annual issue of the Abstract. A summary for all India is given in the following statement :— Police Statistics.

| HEAD. | 1881. | 1884. | 1886. | 1889. | 1891. |
|---|---|---|---|---|---|
| GRADES, &c. : | | | | | |
| Provincial Officers | 26 | 27 | 27 | 28 | 29 |
| District Officers | 330 | 353 | 360 | 409 | 415 |
| Subordinate Officers on salaries of Rx. 120 per annum and upwards. | 800 | 851 | 909 | 956 | 1,024 |
| Subordinate Officers on less than Rx. 120 per annum. | 13,782 | 14,489 | 14,874 | 15,535 | 15,841 |
| Other Officers (*unspecified*) | 1,600 | 809 | 742 | 789 | 821 |
| Mounted Constables | 3,156 | 3,080 | 2,821 | 3,300 | 3,121 |
| Foot Constables | 104,365 | 108,137 | 109,331 | 113,680 | 116,012 |
| Water Police | 707 | 690 | 511 | 504 | 379 |
| Others (*unspecified*) | 22,780 | 14,905 | 14,434 | 14,756 | 14,857 |
| *Total of all grades and kinds* | *147,544* | *143,341* | *144,009* | *149,957* | *152,499* |
| TOTAL COST Rx. | 2,330,513 | 2,398,790 | 2,362,066 | 2,583,564 | 2,647,992 |
| EMPLOYMENT : | | | | | |
| Jail Guards | 4,998 | 3,526 | 2,759 | 2,392 | 2,316 |
| Escort, and Treasury and other Guards | 11,980 | 33,040 | 35,013 | 35,293 | 37,148 |
| General District Duties | 98,227 | 79,833 | 78,620 | 84,533 | 85,161 |
| Municipal and Harbour Duties | 27,222 | 25,932 | 25,730 | 26,722 | 26,837 |
| Cantonment Duties | 2,184 | 2,374 | 2,410 | 2,488 | 2,506 |
| ARMAMENT : | | | | | |
| Fire-arms | 53,994 | 54,051 | 53,892 | 60,685 | 58,606 |
| Swords | 44,392 | 45,083 | 44,249 | 43,508 | 44,962 |
| Truncheons only | 50,627 | 60,208 | 40,133 | 40,153 | 40,006 |

It should be noted that the civil police alone is included, a fact of importance in connection with the distribution of the force in Upper Burma and Assam. In the case of the latter province, however, it appears that the frontier force is not altogether excluded from the figures for the first year quoted.

The first point that appears worth noticing in these figures is that, on the whole, the police force has, numerically speaking, kept pace with the population; though in some provinces, as will be shown below, there have been material changes in the 10 years included in the return. Taking the country as a whole, there were seven policemen to every 10,000 of population in 1881, and exactly the same number in 1891. In the former year each policeman, deducting the Provincial Officer and the Superintendents of Districts with their Assistants, had a charge of six square miles, and the same was the case in 1891. But the figures for the whole country are of little value in connection with the present subject. The marginal table gives a few of the main Provincial details, worked into a proportional form. In respect to population, Bombay and Berar alone share the steadiness of ratio of the general average. In Bengal, the North-West Provinces, the Panjab, and the Central Provinces there is now one policeman less in 10,000 of the population than there was 10 years ago.

| PROVINCE. | Number of Police per 10,000 of Population. | | Number of Square Miles to each Policeman. | | Percentage in 1891 armed with | | | Percentage in 1891 engaged in | |
|---|---|---|---|---|---|---|---|---|---|
| | 1881. | 1891. | 1881. | 1891. | Fire-arms. | Swords. | Truncheons only. | General Police Duty. | Guards, Escorts, &c. |
| Bengal | 4 | 3 | 6 | 6 | 15·6 | 7·3 | 77·1 | 71·4 | 28·6 |
| North-West Provinces | 8 | 7 | 3 | 3 | 29·1 | 46·6 | 24·3 | 58·1 | 41·9 |
| Panjab | 11 | 10 | 5 | 5 | 48·9 | 50·6 | 0·5 | 68·2 | 31·8 |
| Central Provinces | 9 | 8 | 10 | 9 | 40·4 | 4·6 | 55·0 | 75·9 | 24·1 |
| Assam | 8 | 12 | 11 | 9 | 45·6 | 2·9 | 51·5 | 58·9 | 41·1 |
| Madras | 8 | 6 | 5 | 6 | 49·4 | 43·0 | 7·6 | 79·5 | 20·5 |
| Bombay | 12 | 12 | 6 | 5 | 39·1 | 35·0 | 25·9 | 73·0 | 27·0 |
| Lower Burma | 19 | 20 | 12 | 9 | 78·3 | 17·1 | 4·6 | 93·1 | 6·9 |
| Upper Burma | – | 74 | – | 4 | | | | | |
| Berar | 10 | 10 | 6 | 6 | 46·6 | 26·7 | 26·7 | 70·8 | 29·2 |
| INDIA | 7 | 7 | 6 | 6 | 40·8 | 31·3 | 27·9 | 72·7 | 27·3 |

In Assam, where the military or frontier force is taken into the calculation on both

Police and Prisons.

both occasions, there has been a noteworthy increase in the proportion, and to a slight extent the same may be said of Lower Burma, where the military element under the system in force up to the end of the period with which we are dealing was, except temporarily, very small. Under the new scheme, instead of 8,397 civil and 1,114 military, as in 1891, there are to be 4,976 of the one and 3,595 of the other. In the Upper Division of the Province the civil police numbered in 1891, 7,487 to 14,349 military, and as the population is very sparse, the ratio is remarkably high. The relations between police and area are more constant, and only show material variations in the case of Assam and Lower Burma. It is curious that Madras should return a more extensive beat than in 1881, and that the number of police should have decreased, according to the general returns, from 24,748 to 21,471. In the next section of the table, as well as in that which follows it, the military police in Assam and Burma are excluded. The armament has been on the whole considerably altered in the decade. The number of men armed with truncheons only has decreased in proportion from 37¾ per cent. of the whole number to 28; the balance is restored by the increase in the proportion of those furnished with firearms, which from 34 per cent. rose to 39 in 1886 and to 41 in 1891. The middle term, that of the men provided with swords, rose only from 28 to 31. Taking only the figures of the last named year, it will be seen that truncheons largely predominate in Bengal, where only 15·6 of the police have guns. In Burma, even with the omission from the account of the military police, firearms are in the hands of 78 per cent. of the force, and truncheons are furnished to only 4·6. In the Panjab swords seem in favour, and the less dangerous weapon sinks into insignificance. So it does in Madras, but the gun there predominates over the *arme blanche*. The policemen in Assam and the Central Provinces, on the other hand, seem to find no use for cold steel, but when the half of their number that is armed with truncheons fails, the resort is to firearms. There is but little that need be said regarding the last section of the table, as the difference of distribution arises to a great extent from differences in the system of district administration, and the extent also to which the military forces are detached to serve as guards in treasuries and jails, so as to release the police for general duty. The proportion of men on the latter is highest in Burma, as is to be expected, and lowest in the North-West Provinces and Assam. In the latter, of course, there is the aid of the frontier corps to supplement the ordinary district force, but in the other Province less than 60 per cent. of the police seem to be employed otherwise than on guard or escort duty.

It is not proposed to enter further into the crime returns than was done in the preceding chapter. To deal with them in a manner that would do full justice to the work of the police entails the analysis of an amount of detail that would be quite out of place in this review; whilst merely to quote general proportions, such as those of convictions to reports, to charges investigated, or to cases brought to trial, without entering into the rules of police procedure, the discretion allowed to the investigating officer, the general nature of the offence as defined—for the penal code definitions are often of a comprehensive sweep—to ignore all this would lead simply to wrong impressions of the body whose work is under review. Nor, again, is it necessary to enter here into special subjects that do not fall within the scope of general police duties, such as female infanticide, in which, it may be remarked *en passant*, the police supervision has been apparently very beneficial, the working of the Arms Act, and so on. We conclude, therefore, with a brief statement of the finances of the police department, taking the details from the general accounts of the Government of India for 1891–92.

## Account of Police Receipts and Charges, 1891–92.

| | India. | Central Provinces. | Upper Burma. | Lower Burma. | Assam. | Bengal. | North Western Provinces and Oudh. | Panjab. | Madras. | Bombay. | Smaller Provinces. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Receipts:** | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Receipts on account of Police supplied to Public Departments, Private Companies, and Persons. | 26,560 | 1,345 | 344 | 363 | 327 | 1,674 | 2,541 | 1,843 | 2,370 | 15,753 | — |
| Contributions received for Police furnished to Municipal, Cantonment, and Town Funds. | 81,269 | 643 | 12,195 | — | — | 654 | 6,303 | 55,286 | — | 6,188 | — |
| Recoveries on account of Presidency Police | 28,418 | — | — | — | — | 13,119 | — | — | 3,253 | 12,046 | — |
| Recoveries on account of Village Police | 19,706 | — | — | — | — | 19,703 | — | 3 | — | — | — |
| Fees, Fines, and Forfeitures | 192,134 | 17,062 | 2,400 | 4,418 | 8,149 | 49,538 | 30,751 | 11,194 | 33,838 | 33,963 | 821 |
| Cash Receipts under the Arms Act | 98 | — | — | 20 | 11 | — | 3 | 29 | 1 | 34 | — |
| Contributions for Pensions | 7,132 | 384 | — | 18 | 4 | 806 | 446 | 1,256 | 115 | 319 | 3,784 |
| Miscellaneous | 26,223 | 490 | 2,892 | 715 | 3,977 | 5,873 | 3,513 | 1,062 | 3,149 | 4,001 | 551 |
| Total Receipts | **381,540** | **19,924** | **17,831** | **5,534** | **12,468** | **91,367** | **43,557** | **70,673** | **42,726** | **72,304** | **5,156** |
| **Charges:** | | | | | | | | | | | |
| Presidency Police | 131,803 | — | — | — | — | 72,911 | — | — | 25,359 | 33,533 | — |
| Provincial Superintending Officers of the District Police | 77,570 | 4,209 | — | 11,912 | 3,199 | 12,339 | 14 109 | 13,549 | 12,583 | 5,670 | — |
| District Executive Force: | | | | | | | | | | | |
| District Superintendents and Assistants | 240.283 | 16,300 | 21,654 | 23,169 | 6,213 | 46,013 | 39,601 | 33,033 | 29,460 | 22.443 | 2,397 |
| Inspectors, Constables, &c. | 1,642,266 | 87,484 | 115,146 | 158,169 | 27,797 | 268.812 | 272,914 | 187,963 | 250,685 | 242,413 | 30,883 |
| Office and other Establishments | 32,209 | 777 | 4,083 | 210 | 2,111 | 15,916 | 91 | 449 | — | 8,107 | 465 |
| Police Hospitals, Establishments, and Charges | 8,676 | 1,443 | — | — | 243 | 2,485 | 2,108 | — | 1,797 | 510 | 90 |
| Clothing | 101,674 | 5,124 | 6,924 | 8,237 | 1,634 | 12,278 | 25,940 | 7,005 | 16,859 | 15,997 | 1,676 |
| Arms and Accoutrements | 29,741 | 1,161 | 3,215 | 1,586 | 162 | 872 | 4,301 | 2,086 | 4,144 | 12,199 | 15 |
| Miscellaneous | 248 491 | 11,688 | 27,647 | 23,230 | 4,009 | 49,342 | 24,702 | 21,936 | 48,639 | 33,443 | 3,855 |
| *Total District Executive Force* | *2,303,340* | *123,977* | *178,669* | *214,601* | *42,169* | *395,718* | *369,657* | *252,472* | *351,584* | *335,112* | *39,381* |
| Railway Police | 52,450 | 1,894 | 1,430 | 4,116 | 101 | 11,285 | 5,120 | 12,995 | 1,449 | 10,545 | 3,515 |
| Municipal and Cantonment Police | 70,329 | — | 11,098 | — | — | — | — | 55,226 | — | 4.005 | — |
| Village Police | 378,590 | — | — | 15,377 | 109 | 20,064 | 255,309 | — | 648 | 87,085 | — |
| Guards for the Customs and Salt Departments | 488 | — | — | — | — | — | — | — | 488 | — | — |
| Special Police | 767,747 | — | 493,069 | 28,591 | 76,225 | 79,797 | 447 | 27,711 | 856 | 61,051 | — |
| Cattle Pounds | 61,484 | 5,880 | 78 | 432 | 2,306 | 4,061 | 8,864 | 3,016 | 24,627 | 12,029 | 191 |
| Steam Boiler Inspection, Establishment, and Charges | 4,814 | — | — | 733 | — | 2,148 | — | — | — | 1,933 | — |
| Thuggee and Dacoity | 11,253 | — | — | — | — | — | 13 | — | — | — | 11,240 |
| Miscellaneous | 769 | — | 169 | — | — | — | 2 | 412 | — | 186 | — |
| Refunds | 7,973 | 62 | 242 | 733 | 52 | 5,671 | 398 | 119 | 1 | 695 | — |
| Total Charges | **3,868,610** | **136,022** | **684,755** | **276,495** | **124,161** | **603,994** | **653,919** | **365,500** | **417,595** | **551,842** | **54,327** |

Police and Prisons.

On the receipt side, the prominence of the three Fs—Fees, Fines, and Forfeitures, is noteworthy. On the other side of the account, it will be seen that the system of payment of village police varies very materially from province to province. In the North-West Provinces alone is there any considerable item shown under this head. In Bombay the proportion is fairly high, possibly owing to the inclusion of Sindh as well as to the extension of the plan of cash payment in lieu of an assignment of land on service tenure. In Madras there is little debited here, and in the Panjab none. The special charges on account of the police in Upper Burma claim attention, and the marginal statement of the police receipts and expenses for the last 11 years shows how, until the year in which the recent revisions appear in the accounts, the increase in the disbursements has been largely due to the above cause.

| Year. | Receipts. | Charges. | | |
|---|---|---|---|---|
| | | (a) Total. | (b) District Executive Force. | (c) Upper Burma Charges, included in (b). |
| | Rx. | Rx. | Rx. | Rx. |
| 1881-82 - - | 248,005 | 2,553,861 | 1,905,451 | — |
| 1882-83 - - | 227,642 | 2,642,892 | 1,945,099 | — |
| 1883-84 - - | 311,874 | 2,761,054 | 2,080,256 | — |
| 1884-85 - - | 319,400 | 2,832,725 | 2,094,897 | — |
| 1885-86 - - | 321,011 | 2,852,724 | 2,103,879 | — |
| 1886-87 - - | 315,863 | 3,285,097 | 2,152,801 | 349,022 |
| 1887-88 - - | 350,293 | 3,693,621 | 2,072,610 | 709,209 |
| 1888-89 - - | 352,997 | 3,754,294 | 2,058,970 | 795,063 |
| 1889-90 - - | 366,438 | 3,887,564 | 2,062,921 | 861,720 |
| 1890-91 - - | 369,383 | 3,859,683 | 2,072,207 | 735,877 |
| 1891-92 - - | 381,540 | 3,868,610 | 2,303,340 | 493,069 |

## PRISONS.

Administration.

The jails of India are classed under three heads—Central, District, and Subsidiary. They are regulated by local enactments in the case of the two Presidencies and Bengal, and by the Act XXVI, of 1870, passed by the Governor General's council, in territory immediately under the Government of India. In consequence, however, of material differences found to exist as regards jail rules and discipline, it is in contemplation to enact one general Act regulating the Administration of places of confinement throughout the country. The draft of the proposed law was prepared and circulated for the opinion of the local Governments and Administrations after the end of the period to which this review relates, so it is out of place to discuss the details of the modifications introduced, especially as the Bill is not in an advanced stage. It may be stated, however, that the general lines are those of the English Prisons Act of 1865 (28 and 29 Vict. cap. 126), which was taken as the model for the Act of 1870 above mentioned, and that the alterations now incorporated are based on the recommendations of a special Committee and a Conference, respectively, of the officers most experienced in jail management in India. As regards the three classes of places of confinement mentioned in the opening sentence of this section, the general principle is that prisoners sentenced to one year's imprisonment and upwards should be confined, so far as there is accommodation for them, in the central jails. Those sentenced to a term of from 15 days to a year may be detained in the district jail, whilst the subsidiary places of confinement should be reserved only for the accused under trial or for persons convicted and sentenced to less than 15 days' imprisonment. The subject of transportation will be discussed later in this chapter. The superintendence of central jails is as a rule vested in a Commissioned Medical Officer, though in Bengal and Madras there is a special department from the members of which the Superintendents are selected. In Bombay, though there is no reservation of the post, in practice it is given to a qualified medical officer. District jails, again, are usually under medical superintendence of the same class, but here, too, the practice of the Presidencies differs somewhat from that in the other provinces, and the charge there is occasionally in the hands of laymen. On the whole, however, the arrangements made ensure efficient supervision by competent sanitary and medical officers, even though the latter may not be in administrative charge. The general supervision over the administration of provincial jails is exercised by an Inspector General, who, in some provinces, combines this office with other functions, not invariably of a cognate character. Inside the jails the system of convict warders obtains to a considerable extent. Generally speaking, prisoners are selected for the post on the ground of good character and satisfactory conduct of their work whilst they have been under restraint, but it is proposed to extend as far as possible the rule that already is in force in some provinces, to avoid promoting to such offices the class of habitual offenders, to which, on the

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the face of their record, prison discipline of the ordinary sort has not proved sufficiently deterrent to justify their removal into positions of trust or authority.

Transportation to the Andamans.

Sentences of transportation are carried out, as a rule, at the settlement of Port Blair, in the Andaman Islands. The exile which the punishment involves is intended to be its most deterrent feature, and the object of enforcing the convict to pass his life in a Penal Settlement is to effect that which it has been found by experience is impracticable in Indian jails, namely, his reformation by protracted removal from the scene of his offence, and by placing before him the prospect of substantial advantages which he can earn by continued good conduct. The risk of such a form of punishment becoming relatively attractive was not overlooked by the Government of India in 1868, before the system of labour and discipline in the Settlement had been organised upon its present basis. Six years later it was reported that so far as the mass of the convict population was concerned, the system was working in accordance with the original intention of the Government in establishing it. Some modifications were made in 1886, which did not, however, affect the general system. In 1888, on the other hand, it was found by the two experienced officers who examined the general subject of jail administration in India with some minuteness, that there was a very widely spread feeling among the prisoners under sentence in favour of transportation, as compared with a long term of hard labour in an Indian jail. This was due, it was found, to the glowing account sent back through returned convicts of the ease and general beatitude of a man on ticket-of-leave in the settlement, who is classed as a "self-supporting" convict, and given a plot of land and permission to build on it his own dwelling. The Government of India, accordingly, on consideration of the above opinion, had a special inquiry made through one of the members of the Committee just mentioned, and Mr. C. J. Lyall, C.S.I., C.I.E., who found that the rumour in question was no doubt generally prevalent, and that it was due to (*a*) the more frequent return of convicts from short terms of transportation; (*b*) the practice in some provinces of sending returned convicts to be released at the jail of the district in which they were convicted; (*c*) the improvement of communication with India, owing to which the journey of a few days across the Bay of Bengal has lost its terrors, since every year tens of thousands visit Burma and the Straits in the ordinary course of their annual search for employment; (*d*) the fact that whilst life in the jail has been made of late more penal, the system in the Settlement was much the same as sixteen years ago. As the system of tickets-of-leave was found to be efficient in its reformative influence, and to fulfil, therefore, the object with which it was established, other remedies had to be proposed; one of these is the abolition of transportation to the Settlement of convicts from India, excluding Burma, not sentenced for life, as this class is not brought under the most wholesome and successful part of the system, that is the ticket-of-leave rules, by which a prisoner is encouraged to start life afresh, and gradually train himself to habits of self-respect, industry and thrift. The main objects of the introduction of term-convicts, to provide a class from which petty officers could be selected and to leaven the mass with men whose interests were different from those of the life convicts, have been found to be obtainable by other means, and in any case, the permeation through the Indian criminal community of the rosy views of transportation published by men returned from short term sentences is a decidedly countervailing disadvantage. It was also suggested to stop the practice above mentioned of sending the returned convict to be released from the jail of his own district, and to release all from the place of disembarkation. The enhancing of the severity of the discipline during the early years of residence in the Settlement is also recommended, with a variety of other changes in the internal management of the convict community, including the stoppage of pecuniary rewards to convicts working in the technical and departmental gangs and to convict officers, a system which is found to provide not only enough money to start the convict as a self-supporting man when he gets his ticket-of-leave, but to enable him, also, to send presents in cash to his relations or friends in India, a result certainly not contemplated at the time the rules were framed. The number of convicts in the Settlement at the time of the above mentioned visit of inspection and inquiry was 12,549, of whom 8,179 were transported for murder, and 9,093 were for life. Of the latter, no less than 3,285 were self-supporting, a stage attained after 10 years of good conduct. At the census of 1891, the whole population of the Settlement was returned

Prisons.

returned at 15,609. At the end of March 1892 there were 11,356 convicts, of whom 71 per cent. were for life. The habitual criminals had been segregated, as proposed by the inquiring officers in 1890, on to a separate island in the neighbourhood, and there were 2,925 self-supporters. Some material progress was made in the year in the reclamation of mangrove swamp and the clearing of forest for occupation. The tea-gardens recently started showed increased outturn, in spite of the serious damage done to parts of the estate by the great cyclone of 2nd November, 1891.

Jail Statistics for 1891–92.

The administration of the jails in India is for all practical purposes to be reviewed from the elaborate returns that are published every year, both in the statistical abstract issued by the Secretary of State, and in more detail in the administration reports of the different provinces and the returns compiled from them in the Home Department of the Government of India. It is not worth while to recapitulate a series of figures, so the statement on page 167 gives for 1891–92 the more important items, and in some cases, their reduction to a proportional form. As regards this special year, it may be noted that in most of the larger provinces there was a considerable increase in the number of prisoners admitted to jail. In Bengal the figure was the highest that had occurred for the last ten years, and in Madras, Bombay, and the North-West Provinces, also, the tendency is in the same direction. Amongst special features of the year was, first, the relaxation in Bengal of the rule as regards the release of moribund prisoners, which had been hitherto restricted to the cases in which the prisoner in question was reported to be likely to die unless he were allowed to return home. The concession is now made in all cases in which the conduct of the invalid has been averagely good. In this province, too, the system of measuring and recording the physical characteristics of all persons convicted of serious crime has been introduced, in accordance with the practice reported to be so successful in Paris. In the Central Provinces the warder system of supervision was adopted in 1890, and the first year's working was stated to be satisfactory, though the number of pensioned Sipai, the class which it is the object of the authorities to enlist, that came forward, was not as high as had been hoped. In Burma, the large number of prisoners released in 1890 seems to have included most of those to whom the clemency of the Crown could reasonably be extended on political

Escapes.

grounds, and instead of 1,534, only 408 were thus set at liberty. Escapes, on the other hand, were more numerous in most provinces. In the North-West, in addition to that of a notorious offender, Ghasita by name, a daring operation during transit by rail from Allahabad and Calcutta was successfully carried out, and the guard in charge of the gang having been overpowered, seven men escaped by jumping off the train. In the same province there was a rather serious outbreak in the Agra central jail, which however had no important consequences. In Madras, too, there were no less than 22 escapes from central jails, but 16 of the convicts were recaptured shortly afterwards. In Bombay, in addition to one rather serious affair like that in the North-West Provinces, in which a gang in transit overpowered their guard and made good their escape, there were several successful evasions from extra-mural gangs, with few recaptures. The question of guarding more satisfactorily convicts in transit has been considered by the local authorities, and rules issued which are likely to prevent the recurrence of such affairs as have been described above.

Reformatories.

The reformatory system has not yet made much ground in India, but has been considerably extended within the decade under review, and every year sees an increase in the number of lads sent on conviction to such institutions in lieu of being sentenced to ordinary imprisonment. In Bengal the Alipore school had 142, and the Hazaribagh 296 inmates. In Bombay the school appended to the central jail at Yarauda returned 105. The corresponding institution in the North-West Provinces was established only in 1889, but has already 128 pupils, and is being extended so as to admit of a larger number. A school of this sort is under contemplation in the Panjab, where the arrangements in connection with the Lahore central jail are inadequate.

Mortality in jails.

In spite of the considerably increased number of inmates, the jails as a whole appear to have been a little more healthy than in 1890. The comparison between the death rates in jails and that among the population at large is always unsatisfactory, as the points of difference are so many and great. In the first place, the registration in all but a few large towns is apt to be very lax, whereas in jails no death escapes record. On the other hand, in the latter, efficient medical attendance is always available, but in the rural tracts such aid is generally beyond reach.

reach. Infant mortality again, is one of the chief factors in the rate amongst the population as a whole, and this is entirely absent from the jail bills. If all these considerations be weighed, the chances seem in favour of the prisoner. The examination of the age statistics collected at the Census, collated with the returns of death in a few localities where the registration is notoriously more correct than amongst the villages of the interior of the country, shows that the above presumption is, so far as the *data* are at hand, correct. The jail mortality, which was 42 per mille amongst the convicts in 1881, is now 30, whereas, according to the Census calculation as above, the general rate is about what the jail rate was ten years ago. The table under consideration shows indeed a higher rate in Assam, but the returns of the last few years from that province indicate a peculiarly unhealthy series of seasons, with the accompaniment of a

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JAIL STATISTICS, 1891-92.

| PROVINCE. | Number of Jails, 1891. | | | Daily Average Number of Prisoners. | | Percentage previously Convicted. | | Percentage of Convicts Punished on Total Convicts in Jail during Year. | Percentage Employed | | | Average Number of Deaths among Convicts per 1,000 of daily strength. | Average Earnings per Head of Prisoners sentenced to Labour. | Total Cost of Prisons. | Average Cost per Head of average strength. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Central | District. | Subsidiary. | All Classes.† | Convicted. | Males. | Females. | | As Officers. | As Servants. | On Manufactures. | | | | Total. | Rations only. |
| | | | | | | | | | | | | | *Rs.* | *Rs.* | *Rs.* | *Rs.* |
| Bengal | 7 | 23 | 102 | 15,916 | 14,448 | 9·4 | 5·6 | 37·5 | 5·7 | 10·7 | 42·1 | 31 | 22·06 | 1,082,683 | 68·00 | 22·94 |
| North-Western Provinces. | 6 | 45 | 22 | 28,235 | 26,126 | 11·7 | 6·0 | 12·8 | 2·4 | 10·8 | 38·4 | 28 | 6·56 | 1,156,654 | 41·87 | 20·69 |
| Panjab | 3 | 31 | 23 | 12,571 | 11,595 | 15·0 | 6·0 | 56·6 | 4·0 | 10·0 | 39·0 | 28 | 18·18 | 778,533 | 63·56 | 24·62 |
| Central Provinces | 3 | 15 | 1 | 4,675 | 4,451 | 15·8 | 9·3 | 29·9 | – | – | – | 31 | 20·56 | 271,657 | 58·06 | 25·00 |
| Assam | – | 9 | 13 | 1,337 | 1,217 | 8·9 | 4·2 | 16·6 | 7·2 | 9·8 | 8·9 | 54 | 25·93 | 101,057 | 81·00 | 33·75 |
| Madras | 7 | 15 | 308 | 9,819 | 8,581 | 7·5 | 3·2 | 6·7 | 7·7 | 9·5 | 33·6 | 37 | 8·31 | 663,215 | 67·62 | 27·81 |
| Bombay | 1 | 20 | 27 | 7,908 | 6,976 | 15·4 | 7·9 | 14·7 | 4·4 | 9·4 | 30·8 | 34 | 21·25 | 523,608 | 67·12 | 27·12 |
| Berar | 2 | 4 | 1 | 991 | 922 | 23·5 | 7·2 | 19·5 | – | – | – | 9 | 14·06 | 61,086 | 61·75 | 24·50 |
| Lower Burma | 4 | 8 | 2 | 8,194 | 7,952 | 22·9 | 4·0 | 92·3 | 10·1 | 10·3 | 50·6 | 30 | 44·37 | 507,219 | 61·90 | 32·44 |
| Upper Burma | 2 | 11 | 3 | 3,259 | 3,112 | 8·2 | 2·9 | | 4·4 | 11·7 | 40·4 | 29 | 17·43 | 238,090 | 73·06 | 31·51 |
| INDIA, 1891* | 36 | 182 | 527 | 93,357 | 85,740 | 12·6 | 6·3 | 30·7 | 5·1 | 10·1 | 38·8 | 30 | — | 5,393,921 | 58·69 | 24·75 |
| „ 1890 | 36 | 182 | 528 | 88,353 | 81,189 | 12·6 | 6·3 | 31·1 | 5·1 | 10·1 | 38·9 | 31 | — | 5,281,288 | 60·25 | 24·74 |
| „ 1889 | 34 | 172 | 523 | 85,072 | 77,982 | 12·5 | 6·2 | 28·2 | 5·0 | 10·2 | 40·2 | 36 | — | 5,165,700 | 61·29 | 25·06 |
| „ 1888 | 35 | 190 | 511 | 79,750 | 72,129 | 13·2 | 6·6 | 27·2 | 4·5 | 10·0 | 41·4 | 33 | — | 4,923,996 | 62·17 | 24·43 |
| „ 1887 | 33 | 194 | 514 | 71,411 | 64,491 | 12·8 | 7·5 | 29·2 | 4·6 | 10·6 | 41·3 | 36 | — | 4,584,778 | 64·61 | 24·40 |
| „ 1884 | 36 | 202 | 213 | 76,941 | 71,013 | 12·8 | 5·8 | 34·9 | 5·4 | 11·4 | 41·2 | 31 | — | 4,807,659 | 62·12 | 22·80 |
| „ 1881 | 34 | 206 | 238 | 91,615 | 79,303 | 17·9 | 9·1 | 29·0 | 4·6 | 12·5 | 43·5 | 42 | — | 4,819,821 | 52·61 | 27·44 |

* Including the smaller Provinces not specified in the above Table.
† Including those under trial and Civil prisoners.

specially fatal disease of a local character, and sundry outbreaks of cholera. In all other provinces the jail rate is below that found as above mentioned. As regards the growth of numbers of the inmates of the jails, it will be noticed that the table mentions only the daily average population, and this fluctuates necessarily with the length of sentences and other factors of a like temporary character. If we consult the full return it will appear that the number of prisoners received and left over from the preceding year has shown a steady upward tendency, from 402,823 in 1881 to 526,804 in 1891. The women have always been in a small minority, as is to be expected. Out of the number first quoted above this sex furnishes but 23,718, and ten years later the corresponding figure is returned at 24,933, and as the returns for the intervening years never vary more than from 21,794 to 24,021, it can hardly be said that crime entailing incarceration is otherwise than stationary amongst the women of India. Another part of the table in which steadiness is the main feature is that relating to recidivism. The number of convicts that have been previously convicted hardly varies at all, save in 1881 and 1882, when the returns were possibly compiled on a different plan from that adopted in later years, since in 1883 the actual numbers fell off suddenly by over 60 per cent. The subject of dealing with habitual criminals is one which as has been already stated, is now under the consideration of the Government of India. The table for 1891 shows

Increased number of prisoners.

Female prisoners.

Habitual Criminals.

Prisons.

shows high proportions only in the case of Lower Burma and Berar, though in the Panjab, Central Provinces and Bombay, the general mean is exceeded. The proportion in Madras is remarkably low, whilst in 1881 and 1882 it was equally above the average, rising to over 23 per cent. in the case of males. As regards the other sex, the greatest difference appears in Berar and Lower Burma, but in few provinces does the proportion rise above one-half of that which is returned against the males. The Central and North-West Provinces show the nearest approach to the latter. The column dealing with punishments is very different from that of previous convictions in respect to territorial uniformity. The general mean, however, for India does not appear to vary much from year to year. The subject is one which was made over for discussion to a special Conference of Inspectors General of prisons, apart from the general jail Committee, and the diversity of practice found to prevail was one of the considerations that weighed most with the Government of India in proposing an Act of general application. The ratio quoted in the table under review is based, it should be stated, on the total number of convicts that passed through the jails during the year, not on the daily average, which is the base taken in the return issued by the Government of India, since the latter every year falls short of the number of people punished, so that we have shown 117 or 120 men punished for every hundred in jail, and in some provinces the proportion is even more irrational. Even on the base here adopted, 92 per cent. of the Burma convicts come under the yoke of prison disciplinary penalties in the twelvemonth, chiefly, it appears, for neglect of the assigned tasks, or for the introduction of forbidden luxuries and other articles. In the Panjab the proportion is just over the half, and in Bengal, 37½ per cent. The rest of the provinces are below the general mean proportion, and in Madras only 6·7 per cent. of the convicts are punished, a fact which may be taken as evidence either of extraordinary good conduct or of remarkable diversity of system of record.

Jail punishments.

Employment of prisoners.

Only the three main heads of employment of prisoners are here given. The rest of the prisoners are set to work on such various tasks as the preparation of food and oil for jail consumption, the manufacture of clothing for prisoners, gardening, and the building of new jails or additions and repairs of those already in occupation. The manufacturing department, again, varies with the circumstances. As a rule, the articles are those which are not made locally by the ordinary artisan of the neighbourhood, but in several jails a large and useful staff is instructed in printing, and turns out the supply of jail and other departmental forms, account sheets, and also does text work in special circumstances. The average earnings shown in the table are calculated on the strength of the convicts sentenced to labour, omitting the jail population that is exempted from task. The incidence rises high in Lower Burma, and keeps near rupees 21 in Bengal, Bombay, the Central Provinces and the Panjab, falling to 6½ and 8·3 in the North-West Provinces and Madras respectively. As the incidence of the earnings and of the total cost, not taking these earnings into account, is given in rupees, the total expenditure on jails, as returned in the Departmental, not the General, Accounts, is also shown in that currency, instead of in the "tens of rupees" adopted in the marginal statement for the last five financial years. It appears that in Lower Burma each prisoner on labour-term works on an average up to the value of his rations, to the advantage of the general taxpayer, but, on the whole, the average runs to not more than two-thirds of that amount. In all the larger provinces the incidence of the net charges fell in some of the cases considerably, as in Madras and Bengal. The gross incidence fell from Rs. 59·3 to 58·7. It is scarcely advisable to trespass further on the space available in this review by transferring to it what may be quite as well learned from the tables already published elsewhere. The table on page 169 will show the distribution of the receipts and charges for the last financial year of the decade.

Jail finance.

| Year. | Receipts.* | Charges.* |
|---|---|---|
| | Rx. | Rx. |
| 1887-88 - - | 266,703 | 761,872 |
| 1888-89 - - | 259,304 | 834,183 |
| 1889-90 - - | 289,613 | 857,691 |
| 1890-91 - - | 278,393 | 866,460 |
| 1891-92 - - | 311,297 | 899,732 |

*Including those on account of Port Blair.

## Jail Receipts and Charges, 1891–92.

| Head | Total. | Bengal. | North-West Provinces and Oudh. | Panjab. | Central Provinces. | Assam. | Madras. | Bombay. | Burma. | | Smaller Provinces and Andamans. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Upper. | Lower. | |
| Receipts: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Sale, proceeds of Jail Manufactures | 234,711 | 91,843 | 39,498 | 15,131 | 17,881 | 1,009 | 24,567 | 11,244 | 6,588 | 25,512 | 1,438 |
| Sale, proceeds of Thuggee School of Industry. | 10,522 | — | — | — | 10,522 | — | — | — | — | — | — |
| Hire of Convicts | 32,324 | 60 | 5,166 | 9,493 | 265 | 5,389 | 712 | 8,482 | 1,094 | 504 | 1,159 |
| Other Receipts | 5,867 | 861 | 438 | 170 | 29 | 70 | 537 | 2,165 | 167 | 21 | 1,409 |
| Convict Receipts, Andamans | 27,873 | — | — | — | — | — | — | — | — | — | 27,873 |
| Total Receipts — Rx. | **311,297** | **92,764** | **45,102** | **24,794** | **28,697** | **6,468** | **25,816** | **21,891** | **7,849** | **26,037** | **31,879** |
| Charges: | | | | | | | | | | | |
| Inspection and General Superintendence. | 23,783 | 5,062 | 4,450 | 3,282 | — | 633 | 5,024 | 2,639 | — | 2,693 | — |
| Presidency Jails | 24,582 | 9,340 | — | — | — | — | 8,484 | 6,758 | — | — | — |
| Central Jails | 218,044 | 50,196 | 47,451 | 9,635 | 15,330 | — | 35,822 | 6,747 | 12,005 | 40,858 | — |
| District Jails | 263,933 | 55,950 | 56,805 | 51,785 | 10,041 | 6,494 | 20,729 | 28,517 | 14,068 | 14,534 | 5,010 |
| Subsidiary Jails | 41,979 | 11,844 | 6,421 | 4,666 | 789 | 1,025 | 8,009 | 3,268 | 1,566 | 3,546 | 845 |
| Convict Camps, and Temporary Central Jails. | 17,757 | — | — | 10,796 | — | 915 | — | 6,046 | — | — | — |
| Schools of Industry | 11,137 | 3,328 | 3,128 | — | 2,132 | — | — | 1,133 | — | 1,416 | — |
| Transportation of Convicts | 1,560 | — | 376 | 217 | 69 | 2 | 486 | 191 | — | 219 | — |
| Jail Manufactures | 182,289 | 66,477 | 25,094 | 14,704 | 28,019 | 692 | 19,088 | 8,217 | 4,272 | 14,591 | 1,135 |
| Miscellaneous | 40 | — | — | — | — | — | — | 40 | — | — | — |
| Total Jails — Rx. | 785,104 | 202,197 | 143,725 | 95,085 | 56,380 | 9,761 | 97,642 | 63,556 | 31,911 | 77,857 | 6,990 |
| Convict Settlement, Andamans | 113,845 | — | — | — | — | — | — | — | — | — | 113,845 |
| Convict Charges, Straits Settlement | 768 | — | — | — | — | — | — | — | — | — | 768 |
| Refunds | 15 | 4 | 2 | — | — | — | — | 9 | — | — | — |
| Total Charges — Rx. | **899,732** | **202,201** | **143,727** | **95,085** | **56,380** | **9,761** | **97,642** | **63,565** | **31,911** | **77,857** | **121,603** |

## CHAPTER VIII.

## THE REGISTRATION OF ASSURANCES AND OTHER DOCUMENTS.

The Registration of Assurances and other Documents.

The system of registering titles and other deeds of importance in India dates from the end of last century, when a Regulation on the subject was passed in 1799 by the Government of Bombay, and between that year and 1827, when the law was consolidated, no less than ten enactments found their way on to the local statute book. It was found that it was conducive to the security of titles to immoveable property, and would greatly faciliate the transfer of such property by sale, mortgage, gift, or otherwise, if a register were kept in every district, and if deeds entered therein were to be allowed preference to an extent that would give the holder an interest in presenting them for registration. At the same time a general register, relating to the same territorial unit, was prescribed for all other deeds, obligations and writings, in order to provide for the record of copies of such documents, and thus afford facilities for proving them in case the original happened to be lost or destroyed, a contingency by no means unlikely in the ordinary conditions of Indian life.

The question was not taken up except in the Western Presidency until 1864, when a general Act was passed by the Governor General in Council relating to registration. This was followed by amending and consolidating Acts in 1865, 1866, 1868, 1871, and finally in 1877, Act III. of which year is now the law on the subject.

Administration.

It is superfluous to enter into the details of the history of the development of the present system. For the purpose of registration, documents are divided into (a) those of which the registration is compulsory, or necessary to the validity of the deed, and (b), those which are not required by the law to be registered, but which can be so treated or not, at the option of the holder. In the former class the main items are deeds relating to immoveable property, especially those in which the consideration involved is above Rx. 10 and others included with these for special reasons, such as leases for long periods. In the second category, that of optionally registrable documents, come those in which the immoveable property involved is of less than the above-mentioned value, or when the deed relates to moveable property, or is a will or authority to adopt, or the like.

The administration of this important department is conducted through a Provincial Inspector General and a staff of local inspectors. The actual work of registration is performed by a large establishment of Sub-registrars, one of whom is generally attached to each revenue subdivision. The District Officer is usually the Registrar for his territorial charge, and supervises the working of the offices therein, hearing the appeals, settling disputed cases, and obtaining the ruling of higher authorities on points of special difficulty or affecting the general interpretation of the law. In many cases the Sub-registrars are full-time workers, though in light charges the duties are performed by a member of the general staff deputed for the purpose, in addition to his ordinary work. The remuneration of the registering agency is either by salary or by a percentage on the fees taken, or both. Special registrars are appointed to some of the larger towns, where the number of transactions is particularly heavy. The case of the village registration under the Deccan Agriculturists' Relief Act will be mentioned later. The registration of Joint Stock Companies, again, forms part of the duty of this department, but as it is so closely connected with commerce and trade, it is more convenient to treat of it in the chapter relating to those subjects.

Changes in law.

The most prominent feature in the working of the Registration Department during the last few years has been the sudden appreciation in some parts of the country of the provisions of the transfer of Property Act, IV. of 1882, referring to registration of certain classes of documents relating to sales and other methods of transfer of immoveable property. An important step was taken in this Act towards rendering the system of transfer of that class of property one of public transfer. The object could not be carried out in its entirety, as the number of registering offices that served all ordinary purposes in India was inadequate to allow of the provision that all transactions relating to land, however petty, should be registered, without inflicting an amount of trouble and inconvenience that would have been in excess of the advantage to be gained by the above obligation. But the Act in question so far follows the Registration law, that it requires every transfer of tangible immoveable property of the value of Rx. 10 and over, and every

THE REGISTRATION OF ASSURANCES AND OTHER DOCUMENTS.

every transfer of a reversion or other intangible thing, whatever its value, to be made by a registered instrument. In case of intangible immoveable property of less value than the sum just mentioned, the transfer may be made either by registered instrument or by delivery of the property. The Act in question is not in force in Bombay or the Panjab, but where its provisions are enforceable there has been, as above stated, a considerable transfer of instruments from the category of those of which registration is optional to that of those in the case of which the above process is compulsory. The change will be found in the returns for the year 1887.

Statistics of prevalence of transactions and their mean value.

The Statistical Abstract shows that the number of transactions in 1891–92 was 2,369,885, omitting Ajmer and the Bangalore Civil and Military station. In 1886-87 it was 1,753,405, and in 1881, 1,355,003. The value, in the aggregate, of the property transferred in the course of these transactions is large, considering the very high proportion borne in India by the agricultural population to the total. In 1891–92 the average value was Rx. 24·5, but as over 90 per cent. of the value involved was secured in instruments affecting immoveable property, it is better to separate this class from the other, by which means a mean figure is produced of Rx. 25·3, against Rx. 19·4 in the case of transactions concerning moveable property. The corresponding figures in 1881 were Rx. 32·9 and Rx. 24·8, the aggregate being Rx. 42,836,981. In 1885, again, there was a mean value of Rx. 26 and Rx 21·5 respectively, on a total of Rx. 44,064,040. The change that took place, as above mentioned, in 1887, affected the distribution, not the value, of the year's transactions. On the whole, however, as the marginal table shows, the tendency has been in the direction of registering documents of lower value than some years ago it was the practice to thus ensure. It is true that this tendency is very marked only in four Provinces, Bengal, Madras, Bombay, and Assam, but it should be borne in mind that the two first-named contain over three-fourths of the total number of registration transactions in the country. The average number of registrations of all sorts, as a whole, was, in 1891–92, about 96 per 10,000 of population, whereas in Bengal the rate was 138, and in Madras 226. In Bombay it falls to 88, and in the Panjab and North-West Provinces to half that rate. But the rate of increase in the practice of registering assurances is not always in accordance with the prevalence of that practice, for it appears that in the last six years the proportion between transactions and population has risen by only 28 and 23 per cent. in Bengal and Madras respectively, whilst in Bombay and the Panjab the rate of increase was 40 and 31. In the North-West Provinces we find the least change, for there the rate falls to 13 per cent., or about double that of the actual rate of growth of population in that tract and Oudh.

| PROVINCE. | MEAN VALUE OF REGISTRATION TRANSACTIONS RELATING TO— | | | | | |
|---|---|---|---|---|---|---|
| | Immoveable Property. | | | Moveable Property. | | |
| | 1881. | 1885. | 1891. | 1881. | 1885. | 1891. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Bengal | 25·7 | 18·4 | 17·9 | 18·1 | 15·6 | 14·7 |
| North-West Provinces | 46·2 | 44·2 | 47·9 | 20·0 | 22·7 | 20·5 |
| Panjab | 41·8 | 43·0 | 48·1 | 24·6 | 18·6 | 22·8 |
| Central Provinces | 41·2 | 39·6 | 49·1 | 13·0 | 15·6 | 13·5 |
| Assam | 36·3 | 20·1 | 15·7 | 36·2 | 29·3 | 25·4 |
| Madras | 28·2 | 20·4 | 19·0 | 43·9 | 26·0 | 28·3 |
| Bombay | 61·4 | 53·3 | 48·5 | 60·1 | 66·5 | 43·7 |
| Berar | 23·1 | 23·1 | 29·0 | 19·4 | 13·7 | 14·7 |
| Lower Burma | 117·7 | 168·9 | 123·9 | 147·5 | 302·1 | 119·7 |
| INDIA | 32·9 | 26·1 | 25·3 | 24·8 | 21·6 | 19·4 |

Class of documents registered.

Next point to notice is the class of instruments registered. Regarding this, the following table gives the leading distribution for India as a whole. The proportion of documents relating to immoveable property has been steadily rising, from nearly 85 per cent. in 1881 to a little over 88 10 years later. The results of the application of the provisions of the Transfer of Property Act of 1882 will be found in the increase in 1887 of the proportion of the registrations under the head "Compulsory," with the corresponding check on the number of the "Optional" section. In a later division of the table, the same feature appears in the transfer under the head of "Sales," from the optional to the compulsory class. Thus the greater portion of the former

| HEAD. | 1881. | 1883. | 1885. | 1887. | 1889. | 1891. |
|---|---|---|---|---|---|---|
| Percentage on Total Transactions of those affecting: | | | | | | |
| A. Immoveable Property | 84·8 | 86·1 | 86·3 | 86·7 | 87·0 | 88·3 |
| *"Compulsory"* | *55·8* | *54·7* | *53·1* | *66·7* | *66·2* | *66·2* |
| *"Optional"* | *29·0* | *31·4* | *33·2* | *20·0* | *20·8* | *22·1* |
| B. Moveable Property | 14·9 | 13·7 | 13·3 | 12·9 | 12·1 | 11·3 |
| Percentage on Total Compulsory of: | | | | | | |
| (*a*) Sales | 22·9 | 22·7 | 22·2 | 38·5 | 39·4 | 39·3 |
| (*b*) Mortgages | 35·1 | 34·2 | 34·0 | 28·2 | 27·9 | 29·2 |
| (*c*) Leases | 25·6 | 26·6 | 26·9 | 21·4 | 21·6 | 20·2 |
| Percentage on Total Optional of: | | | | | | |
| (*a*) Sales | 43·6 | 43·6 | 43·4 | 5·2 | 4·5 | 4·0 |
| (*b*) Mortgages | 42·7 | 41·7 | 42·6 | 71·7 | 73·4 | 74·7 |
| Mean Value per Transaction: | | | | | | |
| (*a*) Immoveable | 32·9 | 29·2 | 26·0 | 27·0 | 25·3 | 25·3 |
| (*b*) Moveable | 24·8 | 33·1 | 21·6 | 21·2 | 22·2 | 19·4 |

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former class now consists of mortgages and the like affecting land or buildings of less than Rx. 10 in value. The Provincial statements show that in Madras mortgage deeds are registered in excess of sales, whilst the number of leases thus ensured is relatively insignificant. In Bengal, on the other hand, leases are 50 per cent. in excess of mortgages or sales, and the latter slightly exceed the mortgages. In Bombay and the Panjab, where the Act of 1882 is not in force, mortgages hold the first place, as in Madras; sales come next, though at a longer interval in the Panjab than in Western India. Leases are scarcely registered at all in the Frontier Province, and in Bombay they only just reach half the sales in number. There are occasionally curious disturbances of the average figures. For instance, the mean value for all India to which reference was made in the last paragraph, was raised in 1883 from Rx. 24·8 to Rx 33 in the case of moveable-property registrations, by a single transaction in the Moradabad District of the North-West Provinces.

In connection with the same subject, it may be noted that in 1881 the lowest mean value was Rx. 23·1 in Berar, and, omitting Lower Burma, the highest was Rx. 61·4 in Bombay. In 1891, however, Assam comes last, with Rx. 15·7; Bengal approaches it with Rx. 17·9, occupying the same relative position as it did in 1881, and the highest values are found, excluding again Burma, in Bombay, as ten years ago, though the figure has been reduced to Rx. 48·5, and in the Central Provinces, where, with Rx. 49·1, the rate is in excess even of that in the Western Presidency. The difference between the values registered in Lower Burma and those in India proper is very marked in both years, and extends to both classes of property.

Village Registration under the Deccan Agriculturists' Relief Act.

In accordance with the provisions of the Deccan Agriculturists' Relief Act of 1879, a special extension of the registration system was carried out in 1880 in the four districts to which that enactment was applied. The innovation consisted mainly in the appointment of the village accountant to be the registrar of instruments of the character specified in the Act, so that registration of these documents might be effected without the need of a journey, occasionally one of considerable distance and at a highly inconvenient season, to the ordinary sub-registry office at the Subdivisional head-quarters. The instruments in question were at first those relating to agricultural land, or to which agriculturists were parties. But in 1886 the law was amended, and instruments, the registration of which is compulsory under the general Act of 1877, were thenceforth to be taken for registry to the ordinary office. It was also found that the village accountant was in a considerable number of cases not competent to fulfil the duties of registrar, and that the requirements of the public in this respect could be met by a less general appointment of that class of functionary to such important duties. After three years, accordingly, the number of village registry offices was reduced from 2,567 to 183, a number afterwards raised, in the course of adjustment, to something over 200. To these full-time registering officers were appointed, men of some experience in the subordinate ranks of Government offices being nominated. The general working of these offices is placed, as in the case of other registration centres, under the District Registrar, and, departmentally, under the Inspector General and his staff of supervising officers. On the whole, the system is reported to work well and to be more convenient to the parties concerned than the ordinary process. Owing to the relatively small nature of the transactions that come before the village registrars, these offices do not receive in the shape of fees, &c. as much as covers the expenses of their maintenance, but this point was anticipated at their establishment as a probable consequence of the step, and was not held to out-weigh the advantages of the latter. The marginal statement above gives the number of transactions with the amount of receipts and charges since the offices were started.

| YEAR. | Number of Transactions. | Receipts. | Charges. |
|---|---|---|---|
| | | Rx. | Rx. |
| 1880 - - - | 218,266 | 5,779 | 4,964 |
| 1881 - - - | 112,665 | 3,189 | 4,522 |
| 1882 - - - | 109,528 | 3,192 | 4,815 |
| 1883 - - - | 69,906 | 3,768 | 5,724 |
| 1884 - - - | 83,338 | 4,643 | 6,011 |
| 1885 - - - | 101,082 | 5,603 | 6,384 |
| 1886 - - - | 89,893 | 4,843 | 6,110 |
| 1887 - - - | 83,264 | 3,085 | 5,577 |
| 1888 - - - | 101,620 | 3,840 | 5,679 |
| 1889 - - - | 118,410 | 4,513 | 5,845 |
| 1890 - - - | 119,839 | 4,506 | 5,788 |
| 1891 - - - | 127,560 | 4,734 | 5,915 |

Finances of Registration.

The financial account of the registration offices and establishment shows a considerable excess of receipts in the way of fees and the like, over expenses. Taking the whole country together, the surplus, which was 53·5 per cent. of the charges

charges in 1881, has been steadily rising since 1883, when it receded to 50·8 per cent. In 1891 it reached 78·8 against 77·2 in the previous year. The general accounts for 1891-92 give the following results :— THE REGISTRATION OF ASSURANCES AND OTHER DOCUMENTS.

RECEIPTS and CHARGES under "REGISTRATION," for 1891–92.

| HEAD. | India. | Bengal. | North-West Provinces and Oudh. | Panjab. | Central Provinces. | Assam. | Madras. | Bombay. | Burma. | | Smaller Provinces. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Upper. | Lower. | |
| RECEIPTS : | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Fees for Registering | 345,006 | 127,702 | 26,263 | 19,703 | 6,737 | 4,401 | 102,322 | 51,810 | 563 | 3,760 | 1,740 |
| Fees for Copies | 24,444 | 2,341 | 9,991 | 5,247 | 2,835 | 54 | 2,887 | 844 | 3 | 89 | 153 |
| Miscellaneous | 30,352 | 3,388 | 4,157 | 1,544 | 1,544 | 11 | 18,240 | 1,125 | 19 | 191 | 133 |
| Total Receipts | 399,802 | 133,431 | 40,411 | 26,494 | 11,116 | 4,466 | 123,449 | 53,779 | 590 | 4,040 | 2,026 |
| *Refunds* | *1,363* | *221* | *37* | *25* | *5* | *8* | *310* | *721* | *7* | – | *29* |
| NET RECEIPTS | 398,439 | 133,210 | 40,374 | 26,469 | 11,111 | 4,458 | 123,139 | 53,058 | 583 | 4,040 | 1,997 |
| CHARGES : | | | | | | | | | | | |
| Superintendence | 15,918 | 6,220 | 1,398 | – | 1,206 | 291 | 3,146 | 3,657 | – | – | – |
| District Charges | 191,945 | 62,127 | 19,280 | 8,080 | 3,092 | 2,345 | 67,889 | 26,434 | 303 | 1,790 | 605 |
| TOTAL CHARGES | 207,863 | 68,347 | 20,678 | 8,080 | 4,298 | 2,636 | 71,035 | 30,091 | 303 | 1,790 | 605 |

It may be observed that the above table relates to the financial year, ending with the 31st of March 1892, so the accounts differ from those departmentally shown for the calendar year. The excess of receipts over charges in the former reaches 91 per cent., varying from 73 per cent. in Madras and 76 in Bombay, to 258 per cent. in the Central Provinces and 227 in the Panjab ; or, to put the point in a different light, the expenses are, on an average, 52 per cent. of the receipts. In Madras and Bengal they are 57 and 51 respectively, and in the Central Provinces, 38 only :—

The following table shows the corresponding totals for the five years ending with 1890–91 :—

| PROVINCE. | RECEIPTS.* | | | | | CHARGES. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1886–87. | 1887–88. | 1888–89. | 1889–90. | 1890 91. | 1886–87. | 1887–88. | 1888–89. | 1889–90. | 1890–91. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Bengal | 103,461 | 101,375 | 109,088 | 119,754 | 123,705 | 56,237 | 57,846 | 59,946 | 62,863 | 62,974 |
| North-West Provinces, &c. | 34,454 | 37,092 | 37,955 | 39,138 | 39,554 | 18,745 | 19,329 | 19,438 | 19,832 | 20,376 |
| Panjab | 19,283 | 22,086 | 22,928 | 22,342 | 23,266 | 10,273 | 10,991 | 11,346 | 7,113 | 7,107 |
| Central Provinces | 7,799 | 8,285 | 9,551 | 10,168 | 10,193 | 4,039 | 4,245 | 4,321 | 4,055 | 4,268 |
| Assam | 3,632 | 3,147 | 3,213 | 4,237 | 4,316 | 2,243 | 2,179 | 2,226 | 2,315 | 2,449 |
| Madras | 86,825 | 90,501 | 95,565 | 102,484 | 108,148 | 61,426 | 62,126 | 65,515 | 65,866 | 67,696 |
| Bombay | 37,958 | 42,727 | 47,143 | 49,064 | 49,491 | 29,874 | 28,473 | 28,723 | 28,964 | 29,183 |
| Lower Burma | 2,473 | 2,781 | 3,174 | 3,576 | 3,558 | 1,395 | 1,370 | 1,501 | 1,613 | 1,967 |
| Upper Burma | 412 | 621 | 428 | 401 | 458 | 23 | 65 | 94 | 97 | 242 |
| Smaller Provinces | 1,640 | 1,544 | 1,763 | 1,782 | 1,942 | 590 | 636 | 571 | 519 | 469 |
| INDIA | 297,937 | 310,159 | 330,758 | 352,946 | 364,631 | 184,845 | 187,260 | 193,681 | 193,237 | 196,731 |

*Deducting Refunds.

## CHAPTER IX.

## MILITARY AND MARINE.

MILITARY AND MARINE.

IN the year 1681, the British power in Bengal was represented by a force stationed at Hughli consisting of 20 men, under a corporal, "of approved fidelity," and to this strength it was restricted by the express order of the Nawab Nazim, ruling at Murshidabad. Just two hundred years ago the enlistment of Natives of India was first undertaken by the Madras authorities. A century later the three Presidencies maintained in the aggregate a force of 7,000 Europeans and 31,000 Natives. The course of another century saw the British power in India supported by 60,000 Europeans and about 110,000 Native soldiers. At the end of the period covered by this review, the European force numbered, at full strength, just under 73,000 men, and the Native troops, including about 14,000 Irregulars and those belonging to local corps, came to 147,500.

Into the history of the development of this army it is out of place to enter here, as the starting-point of the present system is of no more ancient date than the year 1859. The year before the mutiny in Bengal and what is known as Hindustan, in its local and restricted sense of the valleys of the Ganges and Jamna with their upper tributaries, in 1856, that is, the East India Company maintained a force of 38,000 Europeans, with 276 guns, and 348,000 Natives, with 248 guns. Of the former, nine battalions of Infantry, 6,000 strong, were recruited by the Crown in the United Kingdom and made over for training to the Company's authorities in England. The rest were provided by the Crown from the Home army. The command was localised in the three Presidencies, but the Commander-in-Chief of Bengal had authority over the whole of the troops supplied by the Crown, wherever they were stationed, whilst his authority over the rest of the troops was confined to his own Province. There was also, to some extent, a duplicate staff, that for the "Queen's troops," as they were termed, being separate from the rest. The mutiny left a good many regiments in a skeleton state, with officers that is, but no men. On the transfer of the dominion to the Crown in 1858, one of the gravest questions that arose was the future military organisation, especially as regards the supply of European troops. The Commission to whom the discussion of the question was entrusted fought it out over the point whether preference was to be given to a local force, maintained exclusively in India, or to a garrison of Imperial troops to be drafted and exchanged as required, and thus kept in touch with the military organisation of the governing country. The decision of the majority was in favour of the latter plan, and it was also proposed that for the future defence of India a much larger European force than had been kept there before the mutiny would be necessary; that with minor exceptions, such as in special tracts, where acclimatisation was necessary, the artillery should be entirely European, and that so far as cavalry and infantry are concerned, the proportion of Natives to Europeans should be not higher than two to one in the Bengal command, and three to one in Madras or Bombay. The general recommendations of the Commission were adopted and practically form the basis of the organisation of the British Army in India at the present day. Many and important changes, however, have taken place in the detail since the above date. In the first place everything pointed, at that time, to the advisability of reducing the army to a peace footing of the smallest possible size compatible with holding the country, in order to devote as much of the public resources as possible to the material development of India. The chief element in the disturbances of 1857 had been thoroughly crushed, for a generation, at all events, the country was pacified, and external danger was still remote. Including the East India Company's European troops and artillery, the force of that race which it was proposed to maintain was about 69,000 men. This, however, was allowed to drop, till in 1867 it reached its Nadir, and only 55,000 were then in the country. In 1881, as stated at the beginning of this chapter, the whole force was about 60,000 Europeans, and 110,000 Natives. The question of reorganisation was raised again in 1879, after the Afghan war was supposed to be ended. A Commission sat

sat in India to consider the matter, largely with the view of reducing expenditure whilst keeping up the same standard of efficiency. One of the more important of the proposals thus made was not accepted at the time, but has since been adopted, though it has not yet taken effect, and, indeed, did not receive the necessary legislative sanction till a year after the conclusion of the decade with which we are now dealing. It will be referred to, however, in connection with a subject mentioned below. The practical outcome of the Commission's deliberations, therefore, was the reduction of some of the Native regiments, both cavalry and infantry, in number, but an increase in the strength of the rest. The only reduction made in the European troops was in the artillery, which was diminished by 11 batteries. In 1885, however, the political situation had to be regarded from a somewhat different standpoint giving an enlarged horizon, and it was found that measures were necessary which would allow of the concentration of a considerably larger and stronger force in the north-west of India without denuding the rest of the country of military protection. The 11 batteries that had been dispensed with shortly before were re-called; the European cavalry regiments then in India received an addition of a squadron each; each of the European infantry battalions in the country were similarly augmented by 100 men; and three battalions were added. The Native cavalry had a squadron added to each, and three of the four regiments disbanded in 1881 were restored. The infantry was similarly increased in strength, and nine new battalions were raised. Thus, in all, the addition amounted to 10,660 Europeans, 4,700 Native cavalry, and 16,500 infantry. It may be noted in passing that the full benefit of these additions was never reaped, at least in the directions in which it was intended that it should accrue, for shortly after the re-arrangement and reinforcement of the army the acquisition of Upper Burma necessitated the removal from India proper of three battalions of British infantry, with four field and two mountain batteries, as well as 11 battalions of Native infantry. On the other hand, the constitution of an efficient body of military police in Burma has facilitated the conversion into forces employed locally of troops from across the Bay of Bengal who had been found unable to stand the climate or the peculiar conditions of service in those tracts. At the end of the period under review, that is in the beginning of the year 1892-93, the strength of the army in India was 73,000 Europeans, and, including irregulars, 147,500 Natives. The distribution by arms of the former is nine regiments of cavalry, 88 batteries of artillery, of which 42 are field and 23 garrison, and 52 battalions of infantry. Each of the latter, subject to alterations recently proposed, contains 1,033 men. The cavalry regiment contains 631, and the battery, on peace footing, 162, with the exception of the mountain batteries, which have 111, with 206 Native drivers, artificers, and so on. The Native force is composed of 40 regiments of cavalry, each containing 635 officers and men; 122 battalions of infantry, each with eight European officers, and from 832 men in Madras and Bombay, to 912 in the Bengal command, and a company of garrison, with 8 batteries of Mountain Artillery, the latter of 226 each. In addition to the above, are 21 companies of Sappers and Miners.

The Governor General in Council is the supreme head of the Indian army by virtue of the Act of King William IV., under which the whole superintendence, direction, and control of the civil and military government is vested in that body. So far as the exercise of the above powers is concerned, the business of the army is conducted through the military branch of the Secretariat, which, as mentioned in the third chapter of this review, is immediately under the military member of the Governor-General's Council. The executive head of the army is the Commander-in-Chief in India, and communication with him is carried on by the Government of India through the Adjutant-General and the Quartermaster-General. He has under him an establishment of which his Military-Secretary is the head, and under the Adjutant-General's department come the Inspectors-General of Cavalry and Artillery, the Assistant Adjutant-General for Musketry, and the Inspector of Gymnasia. The Quartermaster-General's department is concerned with mobilization, army-signalling, and with the comparatively recently organised Intelligence Branch. Other Departments which may be mentioned are the Medical, the Judge-Advocate's, the Veterinary, and the Military-Educational. The Commander-in-Chief in India is, also, in accordance with the requirements of a byegone age, in supreme command of the Bengal army. This, it must be noted, is not confined to the Province now known as Bengal, which, on the contrary, is that which provides and occupies fewer soldiers than any other part of India. In its

Military and Marine.

its military sense, Bengal includes the Lieutenant Governorships of the North-West Provinces and the Panjab, with Assam and a portion of the Central Provinces. The two other Presidencies have each a separate army under the local Government and the local Commander-in-Chief with his staff. This distribution was in force during the whole of the decade now in question, but it was one of the proposals of the Army Commission of 1879–80 to abolish the separate armies, and to place the whole of the forces of the country under one command, with a Lieutenant-General at the head of the Madras and the Bombay divisions. Some important steps were taken towards such an amalgamation, and since the close of the period under review the requisite legislation has been completed. There will ultimately be four branches of the army, as the overgrown Bengal command will be split into two, one for the eastern, or Hindustan, division, and the other for the Panjab and North-West Frontier. In addition to these, the main sections of the army in India, there are smaller bodies of troops that have been already mentioned in the second chapter of this review. The most important of these is the Haidrabad Contingent, which consists of 4 batteries of artillery, 4 regiments of cavalry, and 6 battalions of infantry. As regards these, it may be stated here as being a convenient opportunity, that the batteries and regiments have been linked together within the last four years, as have the six battalions of infantry by threes. The establishment of officers, too, has been increased from 4 to 8, and the allowances to both officers and men somewhat raised. Another efficient force immediately under the Government of India is the Central India Horse, and there are minor bodies, which though military in name, are chiefly useful as a description of police patrol for the wilder parts of the country, infested by their fellow-tribesmen, whom their more disciplined comrades are supposed to influence in the direction of law and order. There are, finally, the new levies enlisted within the last few years for the protection of the frontier passes against the attacks of marauding bands from the neighbouring heights and valleys. The Khaibar Rifles, which is the best organised of them at present, has become a most useful corps, and, as mentioned in a former chapter, took part in the expeditions with British troops into the fastnesses of the Black Mountain at some distance from their native country. The administration of all these local corps is conducted through the Foreign Department of the Government of India Secretariat, in consultation, necessarily, with the military authorities at Head Quarters. The Imperial Service Corps, in the formation of which the chiefs of the various States have shown their loyal zeal to so gratifying an extent, has been somewhat altered in detail from what was originally proposed. At the end of 1891–92 it consisted of eight guns and 300 artillerymen, in two batteries: one double company of Sappers, and 13 battalions, one half battalion, and two companies of infantry. There is also a camel corps 200 strong, and two transport corps. It may be added that the Imperial Service Corps is included in the scheme for mobilization, to which attention will be drawn later on in this chapter.

When we come to the departments of the Army administration, which have been named above in connection with the general system, it appears that there is hardly one which has not been materially altered, in the way of being either simplified, strengthened or re-distributed, in the course of the last ten years. It is out of the question to enter in this review into the details of all these changes, but as far as space will allow the principal ones amongst them will be

Judge Advocates.

cursorily described. To begin with, one of those that bear a less distinctively military character than the rest, the Judge Advocate's department was remodelled in 1888. In place of three Presidential Judge-Advocates General, one was appointed for all India, with an assistant immediately under him. In Bengal, two deputies each with an assistant, and in the other Presidencies, one each similarly supplemented, with a temporarily appointed assistant for Burma,

The Medical department.

were sanctioned. The Medical Department, in its two branches, the Army Medical Staff and the Indian Medical Service, is represented under the Government of India by two Surgeons Major-General. The Principal Medical Officer of Her Majesty's forces in India has the direction of the medical department concerned with the troops, both British and Native, and medical officers, although in the Indian Medical Service, can only be transferred from duties in connection with the military, with his consent. The Surgeon Major-General with the Government of India, who is usually selected from the Indian Medical Department, is also Sanitary Commissioner, and advises that Government on all matters connected with sanitation, &c. He controls, too, the medical

arrangements

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arrangements in jails, civil hospitals and dispensaries, and all medical officers therefore, whose services have been made over to the civil department for employment in station, sanitary or similar work are under him. Apart from a considerable increase in the number of the staff employed, the changes in this department have been mainly connected with the improvement of the position of the lower grades, manned chiefly by natives, and in the provision of trained nurses at some of the larger hospitals under the military branch.

Measures affecting health and comfort of the troops.

But it must be pointed out that a great deal has been done of late in the way of improving the general sanitary condition of the large cantonments, under the initiative of this Department. The water supply has been tested and improved where unsatisfactory as in places like Mhow, Rawal Pindi, Bangalore, Quetta, Delhi, Allahabad, and some of the Hill sanitaria. In certain cantonments, again, the milk supply was charged with being the cause of outbreaks of disease, and in many others there is a danger, to some extent, that the local purveyors will not adhere to fair dealing in respect to this liquid where the demand is so great and so constant. The experiment of establishing dairy farms, therefore, to provide the requisite supply was sanctioned on the suggestion of a special committee which sat to investigate the causes of enteric fever that had prevailed in two important cantonments in Upper India. The result has been generally satisfactory, so the system will probably be extended. An inquiry into the dairy industries in India was made by Mr. Keventer, an expert, in 1890–91, and the Government of Bombay retained his services in order to organise dairy arrangements in certain parts of that Presidency. The results of these attempts will materially aid the military authorities in their decision as to the advisability of extending the system wherever practicable. Another grave sanitary question that has been prominent during the last six or seven years is the housing of troops. As regards the European troops, huts have been substituted for tents in hill camps at the various sanitaria on the slopes of the Himalaya, and the comfort and health of the men receive increased attention when new quarters of a more permanent character are being constructed. The Native army, with the exception of the Panjab frontier force, certain Gurkha battalions, and the troops serving in Burma, has hitherto been expected to build and maintain its own lines, allowances being made for the purpose by the State on different systems in the three commands. In 1889 the rules were revised. In the case of Bengal, the rules as to the building of huts remained unaltered, but the repairs are in future to be effected out of a fixed monthly allowance to each regiment, so that the buildings are expected to be always maintained in a proper condition. In Bombay an annual grant has been made for new works and another for the maintenance of the old lines, and it is expected that in about 16 years the whole set that now require modification will be completed on a satisfactory plan. In the case of Madras, the lines are in some instances the property of the regiment, but three other systems were in force. It has now been settled that an annual grant should be made, as in Bombay, out of which a portion is to be spent in the purchase of lines owned as above mentioned. For the Bengal army some further proposals are under consideration, by which the adoption of lines on a standard plan, estimated to cost only Rx. 3,300 per set, will be facilitated. Some such step has been found necessary, as the present lines in too many cases abound in all the sanitary defects that are so prevalent in a crowded native village or small town, especially in the low-lying tracts in which some of the cantonments are situated. In connection with the present subject, too, may be mentioned the conversion of the various buildings and appliances for recreation attached to British regiments into systematically organised Regimental Institutes, a reform that was initiated in 1887–88. The new scheme provides for two departments of such institutes, one for refreshments, the other for recreation. The former includes canteen, coffee-shop, stores, and supper room, whilst the other is to contain a subsidiary coffee shop, reading, and recreation rooms, library, quoit ground, skittle alley, and shooting gallery. It is also part of the scheme that the daily dram hitherto allowed should be abolished, except when on field service. Another innovation that may fittingly find mention in this place, is the withdrawal, to some extent, of the State from the supply of malt liquor, leaving regiments and batteries to make their own arrangements. The growth of the brewing industry in India has led to the clashing of the interests of the local and the British purveyors, the latter alleging that the former enjoy advantages that are not shared by them. It was decided, accordingly,

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accordingly, in 1890, to try the above plan for a year, except as regards the troops serving in a few places where the former arrangements happened to be obviously the more advantageous to the consumers. The year's experience has resulted in the arrangement being sanctioned permanently in Madras, excluding the troops serving in Burma, and in the sanction of the system in the Bengal command.

Remounts.

As regards the department of remounts, but few matters of detail need be mentioned here. The head of the operations carried on under this title is the Director of Army Remounts, with superintendents for the reserve depôts. The horse-breeding branch of the department was transferred to that of Revenue and Agriculture early in 1889. During the decade in question the Director of Remounts has visited Australia and Persia, from which countries a good supply of horses can be obtained, and from the latter country mules also of good quality, are available. The supply of this last animal being considerably beneath the demand, several efforts have been made to procure additions to it both by breeding in India and by importations from abroad. Recently application has been made for aid in this matter to the Canadian, the United States, and the Cape Governments. It does not appear likely to result in much success except possibly so far as the Cape is concerned, where the revival of the trade in horses, which is a desirable object, may be stimulated by this step. The rearing of stock in India itself has received much attention of late, and in Bengal the operations have been very fairly successful, and reserves of the young stock purchased are now established both in that command and in the Deccan. In consideration of the increased demand made under the mobilisation schemes, which will be mentioned again below, a larger reserve has been sanctioned, though it has not yet been practicable to establish it owing to temporary financial pressure. The system of purchase of remounts for the Bengal cavalry through remount agents, which promised well at first, has since 1888 been found unsuitable, and the former plan of regimental purchase has accordingly been resuscitated. It is not proposed, however, to enter here into the somewhat complicated subject of the various systems of supplying cavalry mounts that prevail in different parts of India. In connection with the horse-breeding operations, which have been mentioned above, it appears that in most parts of India where the country is suited to this pursuit the native enterprise has been stimulated and set in the right direction by the plan of awarding prizes at the more frequented horse and cattle shows which are often held under the auspices

Veterinary.

of the Revenue and Agricultural Department. The organisation of the Army Veterinary Department differs from that in many parts of the United Kingdom in that the executive staff is not attached to regiments but to stations, from which visits are paid to places in the neighbourhood, either periodically or as required. The whole department is under the control of a Principal Veterinary Officer to the forces, and three other inspecting officers officiate in the Presidencies. Veterinary institutions are established in Bombay and Lahore, and smaller ones in other large towns under the civil authorities, to whom the services of some of

Ordnance.

the Army Veterinary Surgeons have been transferred. The Ordnance Department is under a Director General, usually a Major General of Artillery, with a Deputy at his headquarters, and an Inspector General in each Presidency, and one also for each division of the Bengal command. The manufacturing establishments are at present nine in number; the Madras powder factory was reduced in 1887, so that there are now two, one in Kirkee (Poona), the other near Calcutta. In place of the powder factory, it was intended to endow Madras with one for the making of harness and saddlery, but there has been a difficulty about the site, so the project is not yet in hand and there is but one institution of this sort in India. There is also a foundry and shell factory, and the manufacture of small-arms ammunition occupies two. Gun carriages are made at three places. Trials to ascertain climatic action on the smokeless powder supplied with the ammunition for the present type of magazine rifles were made and resulted satisfactorily, so as soon as some necessary preliminaries, including a disagreement with a private firm, have been surmounted the manufacture of this ammunition will be undertaken. As regards the armament of the troops, it need only be stated that the European regiments are being gradually supplied with the regulation magazine rifle, and after some discussion, it has been decided to provide the Native troops with the Martini-Henry weapon. The Snider, as was mentioned in the chapter on the Police, has been made available for that force. The heavier arms for the field artillery

and

and the defence works, are being supplied from England gradually. The Ordnance Department is to be reinforced to some extent in 1893, so as to provide the requisite number of assistant superintendents for all the nine factories. MILITARY AND MARINE.

The Commissariat Department has been very materially altered within the period under review. In the first place, the unity of the control has been established in anticipation of the abolition of the presidential army system, by the appointment of a Commissary General in-Chief for all India, whilst maintaining the position of the presidential officials. It was provided, however, that the former should correspond direct with the local heads of departments as regards distribution of stores, sources of supply, &c. A still more important change has been that with regard to transport, which was separated to some extent under the above scheme from the branch dealing with supply. A Commissary General for transport was appointed, subordinate to the Commissary General-in-Chief, with the distinction that he controlled, like the head of the Ordnance, the operations of the whole of India. The whole system of transport has been repeatedly considered and modified since the Afghan war of 1878-79, and the present arrangements are those sanctioned in 1889. On the frontier, for instance, the troops, even in peace time, are provided with full transport, the pack animals being in regimental charge. The provision of forage may be mentioned briefly in connection with this point, as it has always been a matter of difficulty, and in some tracts, fully peopled, of friction also, between the cultivators and the foraging agency. It is proposed to substitute gradually, but as quickly as possible, the supply of grass and hay by the commissariat for that obtained casually by the grass-cutters attached to each body of cavalry and artillery. A sufficient stock of hay is being set apart in all the larger cantonments, and it is proposed that the grass-growing tracts under the control of the commissariat should be constituted reserved forests, in order to secure the protection of the forest laws for the produce. In the Bombay command the grass-cutter has vanished from all mounted corps, and in Madras a beginning has been made with the same process. Commissariat.

In respect to the arrangements for the mobilisation of the army, great strides have been made since 1881. A committee that met in 1886 formulated the general lines of the scheme afterwards adopted with some alterations in matters of detail. In 1890 the revised plans for the Kandahar and Kabul lines were prepared, the mobilisation being by stations, instead of by divisions, the latter, in turn, having been substituted for Army Corps, which had been originally suggested. In 1891 the preparations for these two lines were completed, and those for two more taken in hand. The Imperial service troops have now been included in the scheme, and the obligatory garrisons required in the interior of the country settled. A special grant was made for the above purposes in each of the last three years, amounting to Rx. 287,500, Rx. 50,000, and Rx. 300,000, respectively. The great labour that has been found necessary in connection with these schemes is in itself a proof of the importance of taking the work in hand betimes, and, since the points to be dealt with vary almost from year to year, this labour is not likely to be remittent. Mobilisation.

A measure of distinct importance that has been taken within the last eight years was the separation of the department of military works from the general Public Works Department, of which until 1885 it was a branch, and the officers serving in it were held to be in civil employ. The increased work thrown upon this establishment by the additions made to the Indian forces in 1885, and the subsequent years, led to the transfer of the whole of this work to the military administration, the staff being mainly composed of members of the corps of Royal Engineers. The Director General of Military Works, indeed, is now practically the head of that corps when it is serving in India, and in respect to all business connected with it, is held to be on the staff of the army. In respect to the departmental duties, however, such as the designing and execution of works, the system of accounts, and other matters, the provisions of the Public Works Code are in force just as in the civil branch of the department. The Military Works Department is subdivided into two sections, each under a Deputy Director General, one for fortifications and defence works, the other for such undertakings as barracks, hospitals, and other buildings relating to purely military life. The detailed work of the department is conducted by executive engineers, distributed over the three commands. Special divisions immediately under the Director General are in charge of the coast defence works at the more important ports, Military works.

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Bombay, Rangoon, Aden, and Karachi. The work necessitated by the increase to the European forces in India occupied the attention of this department for some years after 1885. It involved, in fact, the examination and to a great extent the rebuilding, of most of the barracks in the country on a scale which is stated to have materially added to the health and comfort of the inmates thereof. Then, again, the constitution of Quettah as a large garrison led to the construction of a military road upon the Bolan, as well as of the buildings required for the actual accommodation of the troops.* The substitution of substantial buildings for tents in the hill camps and in Rawal Pindi, where the winter climate is equally rigorous, has been mentioned above, so have the numerous water-supply schemes for the larger cantonments. The work done in connection with the defences of the country originated, except so far as Aden is concerned, in 1880, when a permanent defence committee was formed at the army headquarters. Small progress was made, however, until 1885, when a general scheme for both coast and land defence was matured, which, after several revisions in detail, is estimated to cost some Rx. 3,000,000 for the former, including armament and floating defences, and Rx. 1,830,000 for the latter, regarding which the scheme provides for both fortifications and communications by road and rail. It is not necessary to describe works entered in the general programme that have been completed or are in progress.

The scope of the work of this department can be to some extent appreciated from the following table, which gives the expenditure under the main heads for the last few years. It may be mentioned that in 1891–92, 80 per cent. of the amount assigned for new works and repairs, out of the ordinary grant, was expended through the Director General, and that over 60 per cent. of the latter sum was spent on accommodation for troops, European and Native.

EXPENDITURE ON MILITARY WORKS.

| HEAD. | 1886-87. | 1887–88. | 1888–89. | 1889 90. | 1890-91. | 1891–92. |
|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| A.—ORDINARY WORKS: | | | | | | |
| New Works | 489,787 | 732,817 | 538,239 | 530,385 | 598,421 | 562,948 |
| Repairs | 280,938 | 269,896 | 282,365 | 289,956 | 307,171 | 309,766 |
| Establishment | 214,613 | 203,148 | 213,360 | 227,197 | 239,922 | 246,600 |
| Tools and Plant | 12,058 | 9,559 | 8,706 | 11,668 | 8,731 | 10,078 |
| Suspense | *—10,667* | *—27,349* | *—5,269* | *1,084* | *—15,465* | 7,856 |
| Profit and Loss | - | - | - | 99 | — | — |
| Barrack Furniture | 74,144 | 69,328 | 70,805 | 78,074 | 81,896 | 77,270 |
| TOTAL Rx. | 1,060,873 | 1,257,399 | 1,108,206 | 1,138,463 | 1,220,676 | 1,214,518 |
| *Less,—Outlay in England, and exchange thereon* | *1,860* | *34,636* | *15,227* | *19,707* | *30,559* | *14,891* |
| NET TOTAL Rx. | 1,059,013 | 1,222,763 | 1,092,979 | 1,118,756 | 1,190,117 | 1,199,627 |
| B.—SPECIAL DEFENCE WORKS: | | | | | | |
| Coast Defences | 85,553 | 120,993 | 202,892 | 210,729 | 148,894 | 149,535 |
| Frontier Defences | 39,367 | 234,319 | 224,006 | 146,276 | 74,168 | 107,350 |
| Armaments | 119,598 | 91,019 | 295,770 | 240,730 | 235,592 | 383,072 |
| Establishment | 14,719 | 57,788 | 73,177 | 65,058 | 55,150 | 50,778 |
| Tools and Plant | 2,288 | 10,156 | 5,320 | 5,611 | 2,679 | 3,931 |
| Suspense | 451 | 38,343 | 7,387 | 12,594 | *6,115* | *79,766* |
| Profit and Loss | - | 81 | 7 | - | 17 | — |
| TOTAL Rx. | †261,976 | 552,699 | 808,559 | 680,998 | 510,385 | 614,900 |
| *Less,—Contributions from England and outlay there brought to account in India, with exchange thereon* | *138,866* | *181,562* | *360,736* | *280,562* | *257,987* | *310,190* |
| TOTAL NET OUTLAY IN INDIA Rx. | 123,110 | 371,137 | 447,823 | 400,436 | 252,398 | 304,710 |
| Expenditure in England £. | 147,170 | 59,766 | 233,246 | 199,513 | 180,470 | 209,263 |
| Exchange thereon Rx. | 55,346 | 25,114 | 108,526 | 89,532 | 58,969 | 90,875 |
| TOTAL EXPENDITURE Rx. | 325,626 | 456,017 | 789,595 | 689,481 | 491,837 | 604,848 |

* The occupation of Upper Burma necessitated large expenditure of the same character.
† Deducting in 1886–87 Rx. 12,597, which was charged to the ordinary Military Works Grant.

As

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As regards the changes that have taken place in the organisation of the Army itself, it will have been seen from what has been stated above with reference to the chief departments of administration, that considerable way has been made towards the unification of the military forces of the country, in anticipation of the incorporation of the Presidential armies into the general system. In addition to the extension of the authority of the commissariat and transport central offices, amalgamation of other departments has to some extent been accomplished, as in the case of Army clothing. Still more important a step is the fusion of the Staff Corps into a single body for all India.

Staff Corps.

This corps, it is as well to state, is composed of two sections of officers; those employed on military duties with their regiments, and those detached for civil employ, as was mentioned in the chapter on Administration. As regards the actual staff of the Army in India, British officers are eligible, equally with the local staff corps. The latter was formed in 1861 on a Presidential basis. By Royal Warrant their separation was abolished from January 1891, and the whole is now known as the Indian Staff Corps. Officers are liable, accordingly, to be called upon to serve outside the command to which they were first appointed, but, pending the unification of the army in general, they are still employed, as a rule, in the latter, and only transferred with the acquiescence of the Government of the Presidency concerned. Some changes, too, have taken place as regards the mode of recruiting this corps. It was the custom formerly to appoint from British regiments serving in India under certain conditions, and after qualifying in certain vernacular languages, the candidate was admitted and his name removed from the British list. Under the existing regulations, admission is to be through Sandhurst direct, and a certain number of appointments are also offered to Militia and University candidates up to the beginning of 1895. There are other regulations, which need not be set forth here, that help to extend the field of selection for this branch of the service. Then, again, in furtherance of the same policy, as well as with a view to economy, the Government of India has carried out, since 1887, a revision of the General's commands throughout the country, and a new appointment, that of Colonel on the staff, was made to provide for the place of Commandant of large stations and second-class brigades, leaving the commands of the other stations to the senior officer in garrison. The district staff in the Adjutant-general's and Quartermaster-general's departments have been amalgamated under the Senior Staff Officer of the district, and the number of staff officers reduced.

Native troops.

We now pass on to the measures that have been taken during the last 10 years to improve the efficiency of the Native section of the Army in respect to the rank and file, though this is so wide a subject that only a cursory glance at it is practicable in this review. In the first place, it must be borne in mind that the conditions of soldiering in India have undergone an almost complete reversal since the time when the Native force was called into existence, or, it may even be said, was last called out for extensive active operations within the country itself. The points of resistance have shifted from the interior to the frontier, from the mild and constant temperature of the tropics to the fierce extremes of heat and cold in the mountains and table-lands of the north-west, and to the swamps and thickets of the far east. Within the period now in question, the Indian soldier has been called upon to breast the fastnesses of Afghanistan and the Hindu Kush, to be "sniped" by fugitive dacoits in the scarcely penetrable bamboo forests of Burma, and to man a zariba in the eastern Soudan; and going back not so very many years, we find him on exhibition in Valetta and piloting the "elephants of India over the mountains of Rasselas." It is true, of course, that distant expeditions were not unknown to the Sipahi before the present generation, but they have not only been more frequent of late, instead of sporadic (like the Egyptian trip of 1801 or the China and Persian expeditions of the middle of the century), but everything points to the continuance of the tendency mentioned above, namely, to transfer the scene of military attention from the tropics to the outskirts of India, and more especially, in the direction of the north-western frontier. This shifting of the centre of gravity, so to speak, of the distribution of the forces implies far more in India than the mere transfer of bodies of men. The variations of food and climate are so great that to suit the new conditions it is necessary to change somewhat the type of recruit and to seek for him to the north of the Tropic of Cancer, on the plains of Upper

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India or amongst the valleys of Nipal. The moral quality, again, that is required is not the same, and military aptitudes must predominate over those for mere fighting, since courage must be accompanied by strict discipline. Of the former there is plenty to be got in the tropics for service there and to meet all internal requirements, but the object sought in the recent changes of organisation has been to substitute, as far as the circumstances permit, the Jat, Pathan, Rajput, Gurkha and the like, for the class of Maratha that seems now to be almost solely procurable, and the locally raised Musalman and the lower Hindu castes that now form the mainstay of the army of the coast. The scheme, which has been for the most part carried out, includes the conversion of three Bombay regiments of infantry into local levies of Baloch, for service in or near their native country either in the Sindh or the Quettah command. Then, again, the conditions of military action in Burma, which forms part of the Madras command, proved beyond the capacities of the troops of that Presidency, so it is proposed to substitute for these men nine battalions of infantry composed of Panjabi and Gurkhas, with a sprinkling of Hill men from Assam, and if the experience gained in the military police, &c., justifies the step, it is possible that some of the Shans and Karens may be drafted into the line. Six of these battalions have been already formed and others are in hand, as material falls available from the military police battalions. The latter, it should be stated, were raised between 1886 and 1888, from Panjabis, Gurkhas, and Eastern Hill men, Kacharis and others, with a dash of Marathas of the better class. In all, they reached a strength of some 18,500, and have been found a most efficient factor in the pacification of that Province. Hitherto, again, they have stood the climate and wear and tear of a sort of guerilla warfare well, but whether a long term of service under the above conditions, or still more, in times of inaction, will not ultimately tend to their deterioration, remains to be seen. As regards the fighting races of the North and North-West, the policy introduced at the suggestion of the Commission of 1859 was to mix up the different races and classes more or less promiscuously. This policy, however, never applied to the Hill-men, who, whether Gurkha or Garhwali, have always been formed into regiments by themselves. It has recently been reversed as regards the Panjab troops. In 1890 four of the so-called "Hindustani" regiments were converted into the same number of Panjabi, composed of Musalmans from the frontier, other Musalmans, Dogras (a Hill-Rajput tribe), and Gúrkhas. As to the first, Afridi companies have also been formed in several of the frontier corps, with the view of enlisting the goodwill of that influential and warlike tribe. In 1891–92, again, an attempt was made to increase the efficiency of the Hindustani branch of the Bengal command by re-organising its 16 regiments on the caste system, so that recruits may be attracted, and the men who enlist may be more at home than under the mixed régime. There will be five classes, two regiments of Brahmans, seven of Rajputs, four of Musalmans, two of Jats, and one of Hill-men. The Bombay authorities began to introduce the same system, but by companies instead of by whole regiments, and the actual conversion has not yet been initiated.

Reserve.

In 1885 the system of linked battalions was introduced with the formation of regimental centres. The latter are to be, as far as possible, at an obligatory garrison near the recruiting ground, and to have one of the linked battalions always stationed at it. In Madras, however, it is impracticable to carry out the second condition, as about two-thirds of the recruits come from a few districts, where only 4½ battalions are quartered. Simultaneously with the above plan that of forming a reserve of native troops was sanctioned. The system is that of "long furlough," with intermediate periods of training. It was introduced at first into the Bengal command and the Panjab Frontier Force, but two years later, it was extended to the two others. The notion was a new and strange one to the persons concerned, so it has hardly taken firm root yet, so small concessions have been made which it is hoped may serve to popularise it. At the outset, the scheme included both an active and a garrison reserve, but it has been since found advisable to devote attention to the former only, and to let the other drop.

Other steps in the same direction are the raising of the pay of the cavalry under the Silahdar system, and the provision of civil employment for pensioners. The former was almost necessitated by the increased cost of living, and the additional expenses which the men had to incur in other ways. The latter scheme was worked out in 1889, so it is as yet scarcely

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scarcely in full operation, but agencies have been recognised through which such pensioners can be helped to suitable employment.

Volunteers.

Passing from the consideration of the regular and professional army of India, it is worth while to devote a few lines to the Volunteers, who now form a valuable addition to the reserve at the larger towns of that country. The movement was initiated, as in England, about the year 1860, and began with a rifle corps in Nagpur, followed by the establishment of the Bihar Light Horse. In 1885 some concessions were made to the members of the various corps, and the latter were placed, for the most part, under the local military administration. In addition to rifle regiments, foot and mounted, India can at the present time show volunteer artillery, light horse, and three naval artillery corps. On several occasions they have been called out on active service. In 1885, for instance, a mounted corps served in Upper Burma, and the pioneer company of the Calcutta Corps took part in the Manipur punitive expedition of 1891. In cases of local disturbance, such as those between Hindus and Musalmans, the presence of this disciplined and well-armed force has been attended with excellent results on more than one occasion, both during and after the ten years in question. There are on the roll about 27,000 men, of whom nearly 23,000 are classed as efficient. Ten years ago, the numbers were respectively 11,500, and 9,000. The employés of the great railway companies are bound to join their respective corps, and in all Government establishments in which the European and Eurasian element is strong corps have been formed without difficulty. The question of forming a Volunteer reserve was brought forward first in 1871, but it was not till nearly 14 years later that practical steps were taken in the matter. Small reserves are now established in several corps in the North-West Provinces, in one in Bengal, in Madras, Rangoon, and Bombay. Camps of exercise, which are such a feature in the cold weather arrangements of the regular army, are now frequently held specially for the Volunteers, under a small Government subsidy, and are very popular.

## MILITARY OPERATIONS DURING THE DECADE.

The active service rendered by the Army during the last ten years has been more varied than usual. The Afghan war was over by the beginning of the period in question, and between April and the end of May 1881 the British forces were withdrawn from Kandahar. Most of the other operations in which the Army has been engaged have been already mentioned in the second chapter of this review, so it is only necessary to briefly recapitulate them in connection with the present subject. About the time of the withdrawal from Southern Afghanistan, a punitive expedition was undertaken against the Mahsud Waziris, in two columns, operating from Tank and Bannu respectively, the strength being 3,660 in the former case, and 4,100 in the other. The object of the expedition was accomplished with only about 8 killed and 24 wounded, and in addition, some valuable surveys were made. Two years later, these observations were extended to the Takht Sulaimani, the highest point of the mountain system to the south-west of Dera Ismail Khan, under the guardianship of a small force. Passing over such operations as those against the Akhas, and the military promenade to quell possible and probable risings amongst the wild tribes of the Santhal and Bhil tracts in 1881, we come to the Zhob Valley expedition made with the same object as that against the Mahsud tribe just mentioned. Some active resistance was encountered at Daulatzai, but resulted in the taking of the enemy's position with insignificant loss to the attacking force. In about a couple of months the country was pacified and the troops nearly all withdrawn. It was not until 1892, and then on grounds unconnected with the local population, that further steps had to be taken by military aid in this part of the frontier. In the early portion of 1888, a movement on Sikkim was undertaken, in consequence of the disagreements between that State and Thibet. A small force of artillery, British infantry, and Native infantry and Pioneers, was moved up, which was reinforced in the autumn up to a total of 500 British and 1,800 Native troops. There were several minor skirmishes, and two strong positions were stormed and taken, but the campaign was practically concluded by the end of September in 1888. The Akazai and other tribes of the Black Mountains showed more fight, when a considerable force was sent against them in consequence of their aggressions round the Agror Valley. Four columns operated, with a reserve, British and Native, at Naushera. After a good deal of arduous

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arduous mountain travelling varied by small but sharp engagements, the tribes made their submission, and the troops were withdrawn. Trouble arose again in the same direction late in 1890, when a march along the range was opposed by the same tribes, with the Hasanzai. In March of the following year accordingly, another expedition was made, comprising some 7,000 troops, which was resisted chiefly by tribes other than the Aka and the Hasanzai. After several bands had been dispersed in a single engagement, the country of the offending tribes was occupied until the Tribal assemblies (jirga) had agreed to the required terms. The ringleader, however, was not found, and as he continued to haunt the vicinity a third expedition had to be sent since the close of the period under review to procure his surrender or expulsion from Baio, in which fortified place he had taken refuge. The enemy evacuated it, however, on the approach of the British force, taking with them the man in question, so there was nothing left to do but to raze the fort and return. The Hunza and Nagyr troubles have been related already, and to settle them the Gilgit garrison was reinforced by some Gurkhas and two guns of a mountain battery with two battalions of the Kashmer Imperial Service Infantry. About a thousand men, in all, crossed the river, and took by storm the strongest position held by the tribesmen, after a staunch resistance. The reduction of a second fort a few days afterwards brought the matter to an end, and the garrison was left but slightly in excess of its usual strength. The Miranzai, or Samana affair, again, consisted of a three column expedition which met with no opposition, followed by a sudden attack in force by the tribes concerned, as soon as the main body of the troops were out of the way. A second advance in three columns was therefore undertaken early in 1892, and speedily dislodged the enemy from the ridge they had occupied, though, owing to desultory fighting in the adjacent country, the whole work of the expedition was not concluded till May. The earlier expedition against the Kidarzai made from the Derajat met with hardly any opposition, and the political objects of the move were attained in little over two months. In another quarter of India, the punitive force despatched to Manipur in April, 1891, achieved its object without resistance, except in the case of the Tamu column, which had a sharp brush with a body of the Manipur troops who could not manage to get away from them. The Kohima column experienced no opposition, and that from Kachar scarcely any. The defence of Thobal by Lieutenant (now Major) Grant, took place before these events, when the news of the difficulties in Imphal first reached the Tamu garrison.

Outside India, there have been in the decade two expeditions to Egypt. The first, consisting of about 2,000 British and 3,900 Native troops, with followers and transport, afterwards reinforced from Aden, was despatched from Bombay and Karachi in July and August, 1882. The second, composed of a regiment of native cavalry, with three infantry regiments and a company of Madras Sappers and Miners, equipped for service, was sent off early in 1885 to Suakin. The fighting and other duties of the next few months need not be described here, but after the close of the operations in the Soudan, the expedition returned to India, with the commendations of every General officer under whose command the troops had come. Finally, we have the campaign and subsequent operations in Upper Burma, in 1885–86. The strength of the original force was about 2,000 British and 6,000 Native troops, with the Naval Brigade that will be mentioned later on in this chapter. The frontier was crossed on the 14th November, and three days afterwards the enemy were dislodged from the forts of Minhla and Gwe-Gyaun-Kamyo, with a loss of an officer and three men killed and four officers and 23 men wounded. There was little resistance between Minhla and Mandalay, where the King submitted on the 29th of the same month. The force pushed on to Bhamo, where a strong post was established. This ended the first phase of the operations. The second gave the military more arduous work, necessitating the reinforcement from India of the troops then in the country by more of all arms, so that, finally, some 7,000 European and 18,000 Native troops were in Burma. Dacoits, as the guerilla bands were called, traversed the country in all directions, and soon made their way into Lower Burma as well as throughout the greater part of the newly acquired territory. A force of nearly 18,000 military police was added to the regular force within a short time, as we have had occasion to mention above. The country was restored to tranquillity by the middle of 1888, though the

the outskirts, which are peopled by wild hill-tribes, continued to give trouble of a different sort. Operations against the Kakhyins and Khyins have never altogether ceased, and in 1891–92, as may have been seen from what is said in the second chapter, the movements of troops in these tracts were especially active and, on the whole, successful in securing pacification of the tribesmen in question. It is superfluous to enter into them in further detail, as their military interest, though it testifies clearly to the quality of the officers and men engaged, is not different from that of other guerilla operations of the sort. To provide for these expeditions, exploring parties and frontier garrisons, as well as against a possible recrudescence of disturbance in other directions, the force that has to be kept in this province is extraordinarily large, and was returned at the end of 1891–92 at 1,907 Europeans and 2,506 Natives in the Lower Division, and 3,138 and 9,481 respectively, in the Upper. These are the figures given in the local return, which differs to some extent from the military tables. MILITARY AND MARINE.

This leads to the question of the general distribution of the forces over India. According to the returns of 1892, which are framed according to Commands, not political divisions, the then force was dispersed as indicated in the following statement.

| Command. | Artillery. | | | | | | | Sappers and Miners. | Cavalry. | | Infantry. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Horse. | Field. | Heavy. | Garrison. | | Mountain. | | | | | | |
| | European. | European. | European. | European. | Native. | European. | Native. | Native. | European. | Native. | European. | Native. |
| Bengal | 486 | 2,268 | 100 | 1,160 | – | 111 | 103 | 804 | 1,893 | 5,072 | 17,221 | 24,840 |
| Panjab | 648 | 1,296 | 100 | 435 | 76 | 555 | 412 | 342 | 1,893 | 9,354 | 14,182 | 32,200 |
| Quettah | – | – | – | 290 | – | 111 | 103 | 171 | – | 1,902 | 2,024 | 5,200 |
| Sindh | – | 324 | – | 145 | – | – | – | – | – | 634 | 1,013 | 1,680 |
| Bombay | 324 | 1,620 | 100 | 870 | – | – | 103 | 825 | 631 | 2,637 | 8,104 | 16,800 |
| Madras | 324 | 1,296 | 100 | 145 | – | – | – | 975 | 1,260 | 1,902 | 6,078 | 14,297 |
| Burma | – | – | – | 290 | – | 111 | 103 | 513 | – | – | 5,065 | 12,615 |
| TOTAL | 1,782 | 6,804 | 400 | 3,335 | 76 | 888 | 824 | 3,630 | 5,677 | 21,501 | 53,687 | 104,632 |

This gives a total force of 206,236, or 72,573 Europeans, and 133,663 Native regulars, as shown in the marginal Table. The largest number of European troops are in the Bengal command, which includes Meerut, Lucknow, Cawnpore, Allahabad, Agra, Barcli, and other large stations. The Panjab shows the largest garrison of Native troops of all arms, which places it, on the whole, at the head of the list.

| Command. | European. | Native. | TOTAL. |
|---|---|---|---|
| Bengal | 23,230 | 30,819 | 54,058 |
| Panjab | 19,109 | 42,384 | 61,493 |
| Quettah | 2,425 | 7,376 | 9,801 |
| Sindh | 1,482 | 2,314 | 3,796 |
| Bombay | 11,649 | 20,365 | 32,014 |
| Madras | 9,203 | 17,174 | 26,377 |
| Burma | 5,466 | 13,231 | 18,697 |
| TOTAL | 72,573 | 133,663 | 206,236 |

Little need be said in this review regarding the health and mortality of the army in India because a special report, with a review of the returns by competent experts, is annually presented to Parliament. The general statistics on this point are given in the Statistical Abstract, also published annually, and the following Table shows the ratio per thousand of the average strength of British and Native troops respectively, of the daily admissions to treatment, the deaths, and the Europeans invalided. Except in the matter of invaliding, it does not appear that there has been much change in the last 10 years. The average mortality, however, for the decade seems to be considerably below that of the period 1870–79, or 14·24 against 19·34 per mille. The chief causes of death are enteric fever, cholera and hepatic disease, and these affect the troops much in this order every year. As compared Health of Troops.

| Year. | Ratio per 1,000 of Average Strength. | | | | | | |
|---|---|---|---|---|---|---|---|
| | European Troops. | | | | | Native Troops. | |
| | Average daily Ill. | Deaths. | Invalided. | | Total Loss. | Average daily Ill. | Deaths. |
| | | | For Discharge. | For Change. | | | |
| 1881 | 69 | 16·86 | 13·24 | 24·91 | 55·01 | 46 | 19·24 |
| 1882 | 65 | 10·42 | 12·11 | 17·20 | 39·73 | 38 | 13·13 |
| 1883 | 63 | 10·88 | 13·29 | 19·32 | 43·49 | 31 | 11·75 |
| 1884 | 67 | 12·56 | 18·27 | 13·47 | 44·30 | 35 | 11·84 |
| 1885 | 71 | 14·55 | 9·14 | 13·73 | 37·42 | 32 | 13·67 |
| 1886 | 75 | 15·18 | 12·56 | 8·78 | 36·52 | 31 | 13·27 |
| 1887 | 70 | 14·20 | 8·47 | 14·24 | 36·91 | 33 | 11·66 |
| 1888 | 71 | 14·84 | 8·77 | 13·94 | 37·55 | 33 | 12·84 |
| 1889 | 86 | 16·60 | 9·52 | 16·40 | 42·52 | 35 | 12·94 |
| 1890 | 87 | 13·84 | 8·77 | 16·52 | 39·13 | 38 | 15·91 |
| 1891 | 79 | 15·89 | 9·11 | 17·67 | 42·67 | 35 | 15·44 |

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compared with 1890, the last year of the decade was more fatal. There was less influenza but more cholera and enteric fever. The admissions to hospital are largely determined by the prevalence of venereal disease, and the ratio of this fell very generally during the last year under review. In 1890 there were 503 admissions per 1,000, whereas in 1891 the proportion was returned as 400 only. The figures for different stations, and even for different commands, show such sudden variations that, statistically speaking, it is unsafe to base general conclusions on them, but to leave them to be analysed in detail by professional inquirers.

Finance.

We come finally to the financial aspect of the military administration, and here, again, it is unnecessary to enter into full detail. The following Table gives the main heads of charges by alternate years, since 1881–82. As regards the receipts, they are confined for the most part to the Commissariat and Ordnance Departments, and only reached Rx. 780,400 in 1891–92. In the Table the charges for military defence works are included, but in commenting on the figures below these items have not been taken into consideration, as they appertain to the last few years only.

DETAILS of MILITARY EXPENDITURE in INDIA and ENGLAND.

| CHARGES. | 1881–82. | 1883–84. | 1885–86. | 1887–88. | 1889–90. | 1891–92. |
|---|---|---|---|---|---|---|
| IN INDIA. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| EFFECTIVE. | | | | | | |
| Army and Garrison Staff | 500,556 | 517,394 | 481,330 | 514,181 | 481,345 | 498,098 |
| Administrative Staff | 191,785 | 185,012 | 183,699 | 191,040 | 193,859 | 191,944 |
| Regimental Pay, Allowances, and Charges | 6,470,141 | 6,141,371 | 6,477,200 | 7,184,223 | 7,227,590 | 7,081,464 |
| Commissariat Establishments, &c. | 3,178,836 | 2,221,313 | 2,180,566 | 3,847,008 | 3,109,662 | 3,681,012 |
| Stud and Remount Establishments, &c. | 132,920 | 128,793 | 228,140 | 233,531 | 252,800 | 295,750 |
| Clothing Establishments, &c. | 107,280 | 123,151 | 93,973 | 179,804 | 193,645 | 247,132 |
| Barrack Establishments, &c. | 202,266 | 185,007 | 194,533 | 231,507 | 214,949 | 240,066 |
| Martial Law | 33,346 | 28,333 | 28,084 | 28,405 | 38,906 | 38,047 |
| Medical Establishments | 389,104 | 564,857 | 563,095 | 639,387 | 618,265 | 682,796 |
| Ordnance Establishments, Stores, and Camp Equipage | 576,936 | 519,814 | 582,730 | 493,056 | 631,667 | 724,316 |
| Ecclesiastical | 29,608 | 28,213 | 28,122 | 30,795 | 30,645 | 28,312 |
| Educational | 42,749 | 40,922 | 38,952 | 37,297 | 43,385 | 44,203 |
| Sea Transport Charges | 125,872 | 51,774 | 46,305 | 58,128 | 54,751 | 66,310 |
| Miscellaneous Services | 424,094 | 286,315 | 3,202,919 | 468,319 | 603,647 | 896,386 |
| Mobilisation | — | — | — | — | 209,745 | — |
| Volunteer Corps | 46,013 | 60,011 | 84,642 | 107,297 | 131,178 | 145,594 |
| Total Effective | 12,451,506 | 11,082,280 | 14,414,290 | 14,243,976 | 14,036,039 | *14,800,287 |
| NON-EFFECTIVE. | | | | | | |
| Rewards | 7,601 | 8,689 | 7,374 | 7,915 | 8,481 | 13,679 |
| Retired Officers† | 29,550 | 40,719 | 35,522 | 126,636 | 147,912 | 113,667 |
| Pensions to Officers‡ | 641,120 | 711,628 | 721,842 | 648,831 | 667,850 | 722,420 |
| Pensions to Widows and Orphans | 21,718 | 20,308 | 20,493 | 23,061 | 25,595 | 30,751 |
| Civil Pensions and Gratuities | 33,427 | 40,668 | 47,567 | 54,489 | 57,244 | 60,258 |
| Total Non-Effective | 733,416 | 822,012 | 832,798 | 860,932 | 907,082 | 940,775 |
| Unadjusted Expenditure | 33,811 | — | — | — | 974 | — |
| Military Operations in Afghanistan | 1,631,924 | — | — | — | — | — |
| Military Operations in Egypt | — | 47,874 | — | — | — | — |
| Special Defence Works | — | — | — | 371,137 | 400,436 | — |
| Total Expenditure in India | 14,850,657 | 11,952,166 | 15,247,088 | 15,476,045 | 15,344,531 | 15,741,062 |
| IN ENGLAND.§ | | | | | | |
| Stores for India | 693,858 | 657,233 | 1,222,268 | 935,256 | 736,225 | 1,590,696 |
| Stores for Afghanistan | 607 | — | — | — | — | — |
| Stores for Egypt | — | — | — | — | — | — |
| Other Payments :— | | | | | | |
| Effective Services | 1,435,925 | 2,064,701 | 1,402,106 | 1,682,256 | 2,022,198 | 1,866,512 |
| Non-Effective Services | 2,692,384 | 3,442,022 | 2,226,317 | 2,695,514 | 2,975,298 | 3,082,331 |
| Military Operations in Afghanistan | 15,079 | — | — | — | — | — |
| Military Operations in Egypt | — | 7,570 | — | — | — | — |
| Special Defence Works | — | — | — | 84,880 | 289,045 | 300,138 |
| Total Expenditure in England | 4,837,853 | 6,171,526 | 4,850,691 | 5,397,906 | 6,022,766 | 6,839,677 |
| GRAND TOTAL | 19,688,510 | 18,123,692 | 20,097,779 | 20,873,951¶ | 21,367,297 | 22,580,739 |

* Unadjusted Expenditure Rx. 61,143.

† Pensions to Europeans from 1887.

‡ Pensions to Natives from 1887.

§ Including Exchange.

¶ Military works, other than special defensive, cost, in addition to the above sum, Rx. 1,222,763, 1,118,756, and 1,199,627, in the three years last mentioned in this table.

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It appears that, excluding the special charges on account of Afghanistan in 1881–82, the expenditure in India has increased by 19 per cent.; the effective charges by 18·8, the non-effective by 28·2. The latter, which were 4·9 of the total in 1881–82, now form 6 per cent. The actual regimental charges have grown by no more than 9·4 per cent., and the commissariat by 15·8. The allocation of the main additions will have been gleaned from what has been said above in the review of the decade. As to the charges paid in England, if we deduct those on account of defence works, it appears that since 1881–82 they have grown to the extent of some 59 per cent. Exchange, however, has not been separately shown for the first four years quoted in the Table. If we take the increase, therefore, since 1885–86, it will be found to be nearly 35 per cent., whilst that in the additional rupees paid to bring the amount up to sterling amounts to 70½ per cent. These charges were 23 per cent. in 1881–82, and now constitute 29⅓ per cent. on the total military expenditure since 1885–86, the addition caused by the divergence of the rupee from sterling has risen from 5·7 per cent. on the total charges to nearly 9 per cent.

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History and Constitution.

So far back as the beginning of the seventeenth century the East India Company maintained a naval establishment in Indian waters. In later years this was entitled the Indian Navy, and placed under the Articles of War. Its head quarters were at Bombay, and in addition to services in connection with transport, survey, and surveillance of the coast of India, it won renown in battle against the other European nations engaged at various times in the struggle for India, and was employed in naval operations even as far off as China and the Persian Gulf. On the passing of the dominion of India from the Company to the Crown, the Indian Navy was not amalgamated with that of the mother-country, but came to an end in 1863, when it was decided that the defence of India against serious attack by sea should be undertaken by the Royal Navy, which last should also provide for the performance of the duties in the Persian Gulf that had hitherto been undertaken by the Indian Navy. For local purposes there were to be two services, one under the Bombay and one under the Bengal Governments, but both under the general control of the Government of India. The functions to be performed by these services were those which the Royal Navy could not well undertake, such as the transport of troops and stores, survey, protection of the ports and the suppression of piracy and traffic in slaves. In return for the services of six of her Majesty's ships the Government of India paid 70,000*l.* yearly, in addition to about 20,000*l.* for a separate survey establishment. The above arrangement was not found to work well as regards either economy or efficiency, so on the report of a distinguished naval officer, specially deputed to inspect and advise upon the system, the two local services were amalgamated in 1877, and the whole of the establishments, afloat and ashore, was constituted Her Majesty's Indian Marine, under the direct control of the Government of India. The officers are appointed by the Secretary of State, and hold the superior posts on the port establishments as well as those on board the vessels attached to the marine, but the pilot service, with the lights and light vessels, the conservancy and shipping establishments and administration, are detached from the newly constituted establishment. Further steps were taken regarding the appointment and grading of officers and engineers, into the details of which it is superfluous to enter, only remarking that the appointment was ordered to be by letter signed by the Viceroy, not by commission. It has since been decided that the ranks and ratings of the Indian Marine shall be established as ranks and ratings of the Royal Navy; that the rank and position of the officers and engineers of the former shall be intermediate between those of the latter and the reserve, and that the titles of the former shall be altered to correspond with those of the Royal Navy. A few matters of detail connected with the above arrangement had not been definitely settled by the end of the period under review. The Director of the Indian Marine has his head-quarters in Bombay, whilst a Deputy director holds office in Calcutta. The term of appointment is five years, but the incumbent is eligible for extension of service, and, as a matter of fact, the post has been filled since

MARINE.

1883 by the same officer. The Indian Marine on its constitution was subject neither to the Naval Discipline Act or that relating to merchant shipping. In 1884, accordingly, the Governor General in Council was empowered by Statute (Act 47 & 48 Vict. cap. 38), to make laws on the subject. Act XIV. of 1887 was passed under this authority, followed in 1888 by Act XVII. of that year The former adopted the general lines of the Naval Discipline and Indian Navy Acts as far as possible, whilst the latter merely supplied deficiencies in regard to grading and rating.

Coast Defence.

In pursuance of the general scheme for coast and harbour defence, seven first class torpedo boats, each with an armament of two three pounder Hotchkiss quick-firers, and two two-barrel one inch Nordenfeldts, in addition to their tubes, have been provided. Six are in the Bombay harbour and one in the Calcutta, but ultimately, three are to remain in the former, two at Karachi, one each at Rangoon and in the Hughli. Two turret ships for the defence of Bombay harbour, which were armed with obsolete guns have been refitted with new 8-inch mark VI. rifled breech-loaders. Two gunboats of the *Sharpshooter* type have also been ordered for Bombay, but had not arrived within the period covered by the present review. These additions to the local Marine necessitated a revision of the establishments required to man them. Various propositions were made, and finally it was decided that the defence flotilla should be made over to the executive control of the Admiral commanding the naval squadron on the East India station, who however may be restrained by the Viceroy in Council from moving any of the vessels from the ports for the defence of which they are intended. The manning to be partly from the Indian Marine, partly from the Royal Navy, and finally the Government of India is to pay an annual subsidy of 60,000*l*. In accordance with this arrangement, the two turret ships, the two gunboats and the seven torpedo boats were handed over to the aforesaid Naval Commander-in-chief on the East India station. In connection with the subsidy above mentioned for the protection afforded by British vessels of the Royal Navy, some reduction has been proposed, in view of the presence of the vessels for the defence of harbours, which would allow the number of the squadron to be reduced to three or four, with a consequent decrease in the cost. But this point cannot be said to be yet decided. Amongst other changes that have taken place during the decade may be mentioned the transfer of a portion of the Government dockyard at Kidderpore, near Calcutta, to the local Port Commissioners, in connection with the wet dock that has been described in a a former chapter of this review. The consideration was the construction of a new steam dock for the Government by the Commissioners, with the grant of free access to it by way of their tidal basin, with a few minor concessions. The first named work is approaching completion, so that shortly it will be possible to dock vessels at Calcutta, instead of being obliged to send them all round to Bombay. In the latter port it has been considered desirable to provide shelter for the torpedo vessels above mentioned, so a new wet basin, along with important improvements to the existing dock, has been sanctioned, and the work on both was approaching completion at the end of the decade under review. It must also be mentioned in connection with the question of harbour defence, that under the new scheme all Government launches are constructed to carry guns of various weights and descriptions. Seven of these launches are known as Class II. guard boats, specially constructed, of which two were obtained from England to serve as patterns for the five boats that are under construction in India. The ordinary launches, merely adapted for guns, are called Class II. Of these there are twenty to be eventually available for service. In the course of the last ten years several vessels have been acquired for local service, and a good many of the old and obsolete amongst those that have been in use for many years past were disposed of, some being sold, others deputed to special purposes, such as the care of the telegraph line in the Persian Gulf, and the local services on the Assam rivers. The acquisition of Upper Burma, again, rendered it necessary to provide light draught steamers for service on the Irawadi, so two stern-wheelers were procured from England, together with a couple of twin-screw vessels for patrol work. In addition to the above, tenders, launches and flats, for transport of troops on the same waters have been provided. The Marine Survey has been making considerable progress in the ten years, but into the details of the operations it is unnecessary to enter here. In 1883 the organisation was revised, and in 1888 some changes were made in accordance with the

the proposals of the Finance Commission, the results being an annual saving of some Rx. 3,000. During the operations in Upper Burma in 1885–6, a naval brigade of 351 seamen, 31 officers, and 62 marines of the Royal Navy was employed under the orders of the General in command of the expedition, and took part with credit in all the active operations until the end of December, when most of the force returned to the coast. In subsequent operations too, boat parties from detachments sent up from Rangoon were again of service in helping to quell disturbances in the Bassein and Sittang tracts. MARINE.

The receipts credited to the Marine, with the charges incurred on account of it, are shown in the following table. Owing to the frequent changes and the incidental variations in the department of late, it is not worth while including in the return more than the last five years of the period dealt with in the review. Finance.

MARINE RECEIPTS AND CHARGES.

| HEAD. | 1887-88. | 1888-89. | 1889-90. | 1890-91. | 1891-92. |
|---|---|---|---|---|---|
| RECEIPTS: | Rx. | Rx. | Rx. | Rx. | Rx. |
| Pilotage | 88,370 | 85,189 | 80,863 | 84,473 | 88,910 |
| Work executed for State vessels | 51,202 | 67,203 | 54,627 | 78,728 | 73,735 |
| Shipping Fees | 6,984 | 7,450 | 8,563 | 9,252 | 9,371 |
| Coast Light Dues | 20,816 | 18,443 | 21,498 | 24,068 | 26,310 |
| Others | 27,655 | 33,481 | 36,919 | 29,085 | 24,088 |
| TOTAL RECEIPTS Rx. | **195,027** | **211,766** | **202,470** | **225,606** | **222,414** |
| CHARGES: | | | | | |
| A.—India (General) | 333,421 | 272,019 | 296,164 | 229,410 | 244,589 |
| *Supervision, &c.* | *101,333* | *96,245* | *97,530* | 92,929 | 94,991 |
| *Establishments Afloat* | *81,236* | 75,963 | *64,058* | 66,699 | 64,884 |
| *Victualling of ditto* | *25,730* | 22,619 | *21,218* | 21,194 | *22,044* |
| *Stores, Coal, &c., net* | *69,474* | 54,427 | *40,349* | 45,477 | *53,429* |
| *Others* | *55,648* | *22,765* | *73,009* | *3,111* | *9,241* |
| B.—Civil Department* | 135,118 | 156,273 | 206,911 | 176,286 | 191,964 |
| *Establishments Afloat* | *12,079* | *12,948* | *14,526* | *15,349* | *21,856* |
| *Victualling of ditto* | *1,390* | *1,237* | *1,385* | *2,265* | *1,528* |
| *Stores, Coal, &c.* | *14,488* | *8,439* | *12,062* | *10,576* | *28,073* |
| *Hire or Purchase of Vessels* | *1,481* | *26,394* | *42,054* | *11,620* | *24,479* |
| *Steamship Company's Subsidies* | *17,831* | *16,308* | *14,868* | *16,241* | *18,971* |
| *Pilotage* | *60,209* | *58,864* | *55,321* | *58,290* | *59,245* |
| *Marine Establishments Ashore* | *10,486* | *9,996* | *13,352* | *14,370* | *13,988* |
| *Lighthouses and Vessels* | *11,023* | *12,445* | *9,251* | *9,238* | *9,876* |
| *Others* | *6,131* | *9,642* | *44,112* | *38,337* | *13,948* |
| TOTAL CHARGES IN INDIA Rx. | **468,539** | **428,292** | **503,075** | **405,696** | **436,553** |
| | £. | £. | £. | £. | £. |
| C.—Charges in England | 142,448 | 102,364 | 106,844 | 115,742 | 133,447 |
| *Contribution for Services of H. M.'s Vessels* | *70,735* | *40,075* | *44,789* | *37,902* | *50,158* |
| *Stores, &c.* | *69,738* | *61,179* | *60,452* | *75,638* | *76,876* |
| *Other Charges* | *1,975* | *1,110* | *1,603* | *2,202* | *6,413* |
| | Rx. | Rx. | Rx. | Rx. | Rx. |
| D.—Exchange on the above | 59,858 | 47,628 | 47,946 | 37,819 | 57,951 |
| TOTAL CHARGES Rx. | **670,845** | **578,284** | **657,865** | **559,257** | **627,951** |

* Including Upper Burma charges for 1888–89, onwards.

## CHAPTER X.

## FINANCE.

FINANCE.

THE financial position of the Government of India is set forth every year in a statement prepared by the member of the Governor-General's Council in charge of this branch of the administration. The financial year corresponds with that adopted in the United Kingdom, and this statement is published towards the end of March. In addition to the actuals of the twelvemonth expiring with the March of the preceding year, it deals with the revised estimate of receipts and charges for the current year, based on the accounts of the eight months immediately preceding, and includes also the first estimates for the year about to open. As early as possible in the Session this statement is laid before the House of Commons, accompanied by an explanatory note on the financial position as ascertained by telegraph up to the latest date, and is discussed in Parliament in the course of the same session. The Statistical Abstract, presented later in the year, contains the leading financial tables in a summarised form for several years back. In addition to these periodical publications, there are the reports of the special Commissions and Committees that have dealt with subjects intimately connected with the finances of India during the last ten years, amongst which may be mentioned that on Indian railways, the Gold and Silver Commission of 1888, and the recent Committee on the Indian currency, whose examination of that problem, however, was made later than the period to which this review relates. There is thus no lack of information on the subject of this chapter, and the free ventilation which it has received of late years renders it unnecessary to treat of it here in more than general outline, without entering into historical disquisition.

Accounts of 1891–92. Revenue Section.

The distribution of the matter which it is desirable to consider here can be best made from the table given on the next page, which summarises the principal financial features of the year 1891–92, with which the decade terminates. It will be noted that the statement is divided into two sections: that relating to the revenue and the expenditure charged against it, and that recording the transactions on other than the revenue account, such as capital outlay, debt, and adjustments. Both sections, again, are cross-divided according to the locality of the transaction, India or England, a distinction which is brought into prominence by the difference between the two countries in respect to the standard of value, the results of which are to be seen in a third column. There is another cross-division which cannot be shown in a general table of this sort, but which will receive notice elsewhere, and that is the distinction in the transactions in India between those relating to Imperial, Provincial, and Local, Revenue and Expenditure respectively. As regards the detail in the first column, the revenue account begins with the principal heads, against which the expenditure is shown in the form of direct demands, except in the case of assignments and compensations. These relate mainly to the salt revenue of some of the protected States, and of the small foreign possessions enclosed in the Provinces of Bengal, Bombay, and Madras, and to certain allowances made on personal, charitable, or religious grounds by former Governments, chiefly in Bombay, and continued by the British authorities. The head of refunds and drawbacks, which is generally shown separately in the gross, is distributed, when dealing with the net figures, amongst the principal heads of revenue above mentioned. Then follow the items that relate to either quasi-commercial undertakings, such as the post and telegraphs, to the mints, or to charges against which certain receipts are set off in the accounts. Some of these, such as Civil Departments and the Army, have been already reviewed. Under the former, the principal items of receipt, for instance, are those on account of Law, and Justice, and Police, whilst those relating to Education have yet to come under notice. The military account, similarly, has been shown in the last chapter to include amongst its larger items of receipt those relating to Commissariat and Ordnance. The expenditure on special Defence Works has also been mentioned. Of the rest, the miscellaneous civil transactions refer chiefly to furlough and pension allowances and subscriptions, and to printing and stationery. The charges under the head of Famine Relief and Insurance may be subdivided into those

# General Financial Summary for 1891–92.

| HEAD. | Revenue and Receipts. | | | | Expenditure and Disbursements. | | | | Net Results. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | India. | England. | Exchange. | Total. | India. | England. | Exchange. | Total. | Receipts. | Disbursements. |
| **A.—Revenue and Expenditure on Revenue Account:** | Rx. | £. | Rx. | Rx. | Rx. | £. | Rx. | Rx. | Rx. | Rx. |
| Principal Heads and direct demands on Revenue: | | | | | | | | | | |
| Land | 23,965,774 | — | — | 23,965,774 | 3,898,583 | 720 | 313 | 3,899,616 | 20,066,158 | — |
| Opium | 8,012,380 | — | — | 8,012,380 | 1,860,784 | 726 | 315 | 1,861,825 | 6,150,555 | — |
| Salt | 8,636,182 | — | — | 8,636,182 | 496,070 | 750 | 326 | 497,146 | 8,139,036 | — |
| Stamps | 4,262,156 | — | — | 4,262,156 | 136,729 | 34,105 | 14,811 | 185,645 | 4,076,511 | — |
| Excise | 5,117,264 | — | — | 5,117,264 | 220,376 | 53 | 23 | 220,452 | 4,896,812 | — |
| Provincial Rates | 3,502,837 | — | — | 3,502,837 | 64,166 | — | — | 64,166 | 3,438,671 | — |
| Customs | 1,701,288 | — | — | 1,701,288 | 183,291 | 34 | 15 | 183,340 | 1,517,948 | — |
| Assessed Taxes | 1,652,823 | — | — | 1,652,823 | 44,303 | — | — | 44,303 | 1,608,520 | — |
| Forests | 1,490,582 | — | — | 1,490,582 | 848,519 | 742 | 322 | 849,583 | 640,999 | — |
| Registration | 399,802 | — | — | 399,802 | 209,226 | — | — | 209,226 | 190,576 | — |
| Tributes from Protected States | 775,961 | — | — | 775,961 | — | — | — | — | 775,961 | — |
| Assignments and Compensations | — | — | — | — | 1,531,860 | — | — | 1,531,860 | — | 1,531,860 |
| *Total Principal Heads of Revenue* Rx. | *59,517,049* | — | — | *59,517,049* | *9,493,907* | *37,130* | *16,125* | *9,547,162* | *51,501,747* | *1,531,860* |
| *Interest (on Ordinary Debt)* | 795,588 | 58,466 | 25,389 | 879,443 | 529,662 | 2,639,345 | 1,146,169 | 4,315,176 | — | 3,435,733 |
| Post Office, Telegraph, and Mint | 2,557,743 | 12,545 | 5,448 | 2,575,736 | 2,047,855 | 265,804 | 115,429 | 2,429,188 | 146,548 | — |
| Civil Departments | 1,652,119 | 2,815 | 1,223 | 1,656,157 | 13,211,411 | 447,918 | 194,513 | 13,853,842 | — | 12,197,685 |
| Miscellaneous, &c. | 734,992 | 113,154 | 49,138 | 897,284 | 2,104,592 | 2,051,250 | 890,780 | 5,046,622 | — | 4,149,338 |
| Famine Relief, and Insurance | — | — | — | — | 1,265,841 | 1,728 | 750 | 1,268,319 | — | 1,268,319 |
| Railways (Construction out of Revenue) | — | — | — | — | 163,233 | — | — | 163,233 | — | 163,233 |
| Railways (*Revenue Account*) | 19,936,289 | 1,225 | 532 | 19,938,046 | 12,145,772 | 5,653,176 | 2,454,962 | 20,253,910 | — | 315,864 |
| Irrigation | 2,272,040 | — | — | 2,272,040 | 2,944,894 | 87 | 38 | 2,945,019 | — | 672,979 |
| Roads and Buildings | 588,117 | 27,197 | 11,810 | 627,124 | 6,051,721 | 109,485 | 47,546 | 6,208,752 | — | 5,581,628 |
| Army Services | 719,423 | 42,517 | 18,464 | 780,404 | 15,741,062 | 4,559,513 | 1,980,026 | 22,280,601 | — | 21,500,197 |
| Special Defence Works | — | — | — | — | 804,710 | 209,263 | 90,875 | 604,848 | — | 604,848 |
| Net Provincial Adjustment | — | — | — | — | *—240,924* | — | — | *—240,924* | 240,924 | — |
| Total (A.) Revenue Account Rx. | **88,773,360** | **257,919** | **112,004** | **89,143,283** | **65,763,836** | **15,974,699** | **6,937,213** | **88,675,748** | **51,889,219** | **51,421,684** |
| **B.—Receipts and Disbursements not on Revenue Account:** | | | | | | | | | | |
| Railway and Irrigation Capital Expenditure | — | — | — | — | 2,247,520 | 873,257 | 379,223 | 3,500,000 | — | 3,500,000 |
| Permanent Debt | 7 | 4,600,000 | — | 4,600,007 | 54,352 | 1,507,362 | — | 1,561,714 | 3,038,293 | — |
| Unfunded Debt | 3,982,584 | — | — | 3,982,584 | 3,083,225 | — | — | 3,083,225 | 899,359 | — |
| Deposits and Advances | 27,616,282 | 5,247 | — | 27,621,529 | 26,137,949 | 3,300 | — | 26,141,249 | 1,480,280 | — |
| Local Loans, &c. | 389,797 | — | — | 389,797 | 1,343,989 | — | — | 1,343,989 | — | 954,192 |
| Railway (*Capital Account*) | 1,381,798 | 1,090,606 | — | 2,472,404 | 1,119,600 | 2,499,196 | — | 3,618,796 | — | 1,146,392 |
| Remittances | 39,061,203 | 188,287 | — | 39,249,490 | 38,042,827 | 1,090,523 | — | 39,133,350 | 116,140 | — |
| Secretary of State's Bills | — | 16,093,854 | — | 16,093,854 | 16,796,540 | — | — | 16,796,540 | — | 702,686 |
| Total (B.) Receipts and Disbursements Rx. | **72,431,671** | **21,977,994** | — | **94,409,665** | **88,826,002** | **5,973,638** | **379,223** | **95,178,863** | **5,534,072** | **6,303,270** |
| GRAND TOTAL Rx. | **161,205,031** | **22,235,913** | **112,004** | **183,552,948** | **154,589,838** | **21,948,337** | **7,316,436** | **183,854,611** | **57,423,291** | **57,724,954** |
| Opening Balance | 17,876,244 | 3,835,050 | — | 21,711,294 | — | — | — | — | — | — |
| Closing Balance | — | — | — | — | 17,287,005 | 4,122,626 | — | 21,409,631 | — | 301,663 |

FINANCE

those implied in the first portion of the title, namely the actual relief of distress consequent upon failure of crops, and protective works, or works which aid the food supply, either by the preservation of the local crop by means of irrigation or by facilitating the importation of food from more fortunate parts of the country, by means of railways or canals. Lastly, any remainder of the grant that may be available after the fulfilment of the above two objects is applicable to the reduction of debt, so that, even if a loan has to be resorted to in a year of serious famine, the amount of the debt may not be permanently increased. The item following the above in the table relates to the construction of railways, provided for out of revenue, but not from the famine grant nor falling within the general revenue account of the railways. Most of the other items explain themselves. The receipts under roads and buildings include, besides tolls on roads and ferries, the rent of State buildings and the incomings of the Engineering college at Cooper's Hill. There remain the heads of Interest and Provincial adjustment. The former relates, as stated, to the ordinary debt only, not, that is, to the account of railways or canals which have been constructed out of capital, the interest of which is shown under the revenue head appertaining to those works. It is as well to mention here that the amount of any new loan is added to the ordinary debt, and as capital outlay is incurred on account of public works of the above class, the amount is transferred from this head to that of the public works debt; so that as the outlay exceeds the addition to the debt, being partly provided from revenue and deposits, the amount of the ordinary debt is gradually reduced. The greater part of the interest here in question on the receipt side is from loans to local bodies, corporations and others, and on the securities held by the paper currency Department in India, and on the investment of the cash balance in England. The provincial adjustment is simply that of the balance to credit of the various Governments and Administrations at the end of the year, and will be mentioned again below. A provincial surplus is transferred from the Imperial to the Provincial side of the balance. Conversely, of course, when the Province has exceeded its allotment, the deficit is made good by a transfer to the Imperial balance from the Provincial balance.

Other than Revenue transactions.

We then come to the second section of the statement, which relates to transactions other than those connected with the revenue. The first is the expenditure on state railways and irrigation works not charged as above, and with this is taken the exchange on transactions in England under this head. The next item is that of permanent debt, of which, as it stood at the end of the year, half is set down against railways, and 13 per cent. against irrigation undertakings, whilst 36 per cent. was raised for other purposes. The accounts show the receipt of 4,600,000*l.*, being the amount raised in sterling for the above purposes, and the repayment of Rx. 1,561,714 under this head. The seventy rupees shown on the receipt side, it may as well be pointed out, represent merely the sum added to complete an even hundred. The unfunded debt consists chiefly of the deposits in Savings Banks in India. The next item, that of deposits and advances, is composed, first, of the revenue and civil deposits at the treasuries, secondly, of the advances on mint certificates, and lastly, those to various civil departments, including the Post Office and Forests. The subject of loans and advances has been already mentioned in connection with Municipalities, Port Trusts and Local bodies, in chapter IV., and in the accounts under discussion these transactions are shown under the two heads of Imperial and Provincial, the net results of each being almost equal in amount. The railway capital account explains itself. It may be noted, however, that the transactions of the East Indian and South Indian lines are excluded from this head. The remittance account is a large one, and the chief items coming into it are the Inland Money Orders, and the transactions between the guaranteed railways, the military and public works, and the civil departments. The net result, however, is necessarily small. The Secretary of State's bills appear on both sides of the account, and the difference between the two items is mostly due to the transactions outstanding in the books at the end of the year. The statement ends with the entry of the balances at the opening and the close of the year respectively. In anticipation of what has to be said on the subject below, it may be noted that, whilst the revenue account shows a small surplus of Rx. 467,535, the finances on the whole indicate a diminution of the balance by Rx. 301,663. Omitting the latter from consideration for the present, it will be seen that the first condition

condition of sound finance, the excess of revenue over expenditure, was, for this year at least, satisfied. But unfortunately, the second and equally important condition, that of stability, is as far off as ever. In reviewing the administration of Indian finances, therefore, it is necessary to devote a few lines to the main conditions on which the situation depends, even though the observations on the subject may appear to those conversant with it trite and axiomatic. FINANCE.

It is necessary, in the first place, to consider the means of livelihood of the population at large and the conditions under which they are exercised. Some two-thirds of the population, then, are agriculturists; another tenth or more is engaged in labour on the land, with the ultimate object of occupancy of a portion of it; the artisans that are required to minister to the simple demands of country life in a tropical and sub-tropical climate are, to a large extent, remunerated by grants of land, and the bulk of the wages of field labour is paid in grain. Nine-tenths of the population are located in villages, and only a fifth in places of a size exceeding that of the ordinary market town. The recognition and present position of professions and commerce date from times comparatively recent in the life of a people, that is, from the British occupation. The two points in connection with the above distribution that are relevant at present are first, that wealth from agriculture, where the latter is the occupation of the bulk of the community, is slow in expansion, and, secondly, that in the conditions of Indian society, ambition and wealth are prone, as a rule, to run towards unproductive expenditure rather than to remunerative investment. The political conditions of the past sufficiently account for the latter tendency, and the rustic mind is slow in changing. A second element in the situation is the physical disadvantage at which India is placed. The warm and comparatively equable climate that renders so light the burden of expenditure on clothes and shelter, has its drawback in the uncertainty of the rainfall over several parts of the country, so that the distress consequent upon a failure of crops affects, as shown above, the bulk of the population in a greater or less degree, and is a difficulty with which a civilised administration has to contend in a manner very different from that which found favour under previous régimes. Then, again, the withdrawal of any portion of the agricultural population from the soil to manufacture on a large scale is hindered by the want of local supplies of coal and iron. Of late years, it is true, these industries have been considerably developed, but the result is noticeable only in relation to their condition some time ago, not to the plethora that has to be relieved. In the present circumstances the artisan is too often, though not always, an agricultural labourer who frequents the factories merely to earn enough to secure him a plot of land in his native place. Thus everything points to resources susceptible under strong and peaceful guidance of steady development, slow indeed, partly by reason of the want of diversity of occupation, and partly, also, because liable to be retarded by natural calamities. The political conditions involved in the financial problem are equally worth note. The British found the country parcelled out amongst a number of Chiefs, who, whether powerful or insignificant, were continually in a condition of intestine or external warfare, so that the development of their territory was outside the sphere of practical politics, even had their tenure been secure. The pacification of India brought with it a load of debt which was bequeathed to those who had the opportunity and privilege of working in a time of peace. The suppression of the Mutiny added to the obligations. Since 1857 the *venue* of the military operations has been changed in the manner and for the reasons given in the preceding chapter, and, even though no fresh war-debt may have been incurred of late, the defence and pacification of the Indian frontiers necessitate, none the less, a continual and steady demand upon her internal resources. At this point the fact begins to be brought home that India is not, and cannot be, a colony of the United Kingdom, but must continue to be her dependency, since the European element cannot be acclimatised there to the extent necessary to enable a local supply to take the place of periodical fresh recruitment from the Governing country. There is also the reason mentioned in the last chapter in favour of the latter arrangement, namely, that the present circumstances require that the army in India should be just as efficient in education, armament, and practice as that within the four seas, and not merely fit to cope with the contingencies likely to arise in India itself. Such a degree of efficiency, it is urged, can only be maintained by continual interchange of regiments with England. The result is that

General factors in the financial position.

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payment has to be made from Indian revenues for the supply of British troops. From the same cause, it is essential to the maintenance of the present standard of administration that the directing and controlling power should be vested in British officers in whom the masses repose a confidence too generally withheld from those of indigenous race, and experience has shown that the same influence is equally necessary to the advance and well-being of the subjects of the Protected States. Here, again, a certain debt is owed to the governing country on account of contributions towards pensions and leave allowances. Finally, as has been stated in the preceding paragraph of this chapter, the general development of the trade of the country and the protection of parts of it against the distress caused by the failure of rain, can only be effected by capital expenditure, and the loans for the undertakings in question are raised to a great extent in the London market. Even in the case of the so-called Rupee-loans less than a third is held by natives of India. Whether this is due to the low rate of interest, the novelty of the mode of investment, the dissipation of the capital of the country in multitudinous small hoards or otherwise, it is not necessary to discuss in connection with the present subject. All that is relevant is the fact that a large proportion of the interest has to be paid away out of India. Owing, too, to the want of coal and raw material, most of the heavy plant for railways, bridges, and so on, and for the military works and armaments, as well as the supply of the various instruments and articles for the manufacture of which fine machinery is required, has to be procured from Europe. All the above payments have to be made in sterling, whereas, it is superfluous to remark, the resources from which payment is made are represented by silver, which is, in India, entirely independent of the value of the other metal. The divergence of the values of the two from each other has for years been continuously increasing at a more rapid rate than the revenue has been expanding, so that the burden of the difference is growing more and more onerous to Indian resources. From the above sketch it may be gathered that the instability of Indian finance, of which mention was made above, is mainly attributable to three causes: First, famine, from the danger of which the country is never exempt, though its effects are likely to be much mitigated to those liable to suffer from them. To attain this end, however, it has been necessary to expend a considerable sum annually, or nearly so, in protective works, but, happily there has been comparatively but little need during the decade of direct relief. Next comes military expenditure, either on active services or on defensive measures. Excluding the war in Afghanistan and the share taken by Indian troops in Egypt and the Soudan, the only operations on a large scale that have been undertaken during the last ten years or so, are those in connection with Upper Burma. But, as is shown in the last two Budget Statements of the Financial Member of Council, little expeditions on the frontier are, in the present day, anything but self-supporting, and such excursions have been seen shown in the preceding chapter to have been comparatively frequent of late. The revenue from opium, again, which has not been mentioned above, is a source of anxiety in Indian finance. It is true that the agriculturist of Bihar, and probably his compeer in Central India, reaps the benefit of the growth of so remunerative a crop, but the State revenue from it depends upon the demand in China, and is paid by the foreign consumer. This subject will be treated of in a later section, and is only mentioned here as being a further element of disturbance in the estimates. The last of these elements, and at present by far the most serious, is the downward tendency, with its concomitant fluctuations, of the gold value of the rupee. In the case of each of the other causes of financial uncertainty there is some advantage or other to be set off against the cost. By the famine policy whole tracts are saved from want of food in times of distress, whilst in ordinary times the extension of communications has tended to foster the spirit of co-operation and enterprise which was altogether wanting in former years. The cost of the army and defence works is, no doubt, open to question in detail, a matter which is beyond the scope of this review, but all are agreed that one of the primary duties to the country is its protection against the invasions that have so often in past centuries devastated the greater part of it. As to the opium revenue, again, it is not necessary to say more in this place than that the profits from its production reaped by both the State and the cultivator are not derived

derived from taxation, and do not fall on the Indian population, so that to this extent, a further financial burden is avoided. FINANCE.

But with regard to exchange on sterling transactions there is no compensation such as those above-mentioned, and the difference between the two currency systems leads to nothing but dead loss to the dependent country. For many years past, as the following table will show, this dark cloud has been spreading over Indian finance, with a silver lining that gets year by year less consolatory. The subject is of such importance in estimating the general position of the finances that it is worth while to enter into it before proceeding to discuss the details of the Budget. The table shows, first, the biennial course of net revenue and expenditure, respectively, in India, and then that of sterling charges and the cost of their conversion into rupees, taking the year 1871–72 as the basis of comparison. In the last section of the table is given the percentage on the revenue of the expenditure and surplus in India, of the sterling charges and exchange, and, finally, that of the net result. In all cases the net figures are used; that is, against the revenue the direct charges, and against expenditure the departmental receipts, are set off, and, except in the sterling charges, the calculation is made in Rx., or tens of rupees. Exchange

PROPORTIONAL TABLE OF NET REVENUE AND EXPENDITURE.

| YEAR. | Variation from the figures of 1871–72 = 100·00. | | | | | Percentage on Net Revenue in India of:— | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | In India. | | Net Sterling Charges. | Exchange. | Rate of Exchange. | In India. | | Net Sterling Charges. | Exchange. | Net Results. | |
| | Net Revenues. | Net Expenditure. | | | | Net Expenditure. | Surplus. | | | Surplus. | Deficit. |
| | Rx. | Rx. | £. | Rx. | s. d. | | | | | | |
| 1871-72 * | 40,229 | 24,371 | 12,305 | 465 | 1.11·126 | 60·58 | 39·42 | 30·59 | 1·16 | 7·68 | — |
| 1873-74 | 97·61 | 114·59 | 99·69 | 194·32 | 98·38 | 71·13 | 28·88 | 31·24 | 2·30 | — | 4·6 |
| 1875-76 | 99·56 | 100·70 | 101·95 | 296·13 | 93·51 | 61·27 | 38·73 | 31·32 | 3·44 | 3·97 | — |
| 1877-78 | 97·63 | 113·49 | 111·79 | 456·56 | 89·90 | 70·42 | 29·58 | 35·02 | 5·31 | — | 10·85 |
| 1879-80 † | 112·50 | 101·73 | 114·17 | 611·40 | 86·31 | 54·78 | 45·22 | 31·04 | 6·28 | 7·90 | — |
| 1881-82 † | 113·03 | 108·49 | 114·02 | 622·37 | 86·03 | 58·15 | 41·85 | 30·85 | 6·36 | 4·64 | — |
| 1883-84 † | 108·36 | 96·52 | 119·98 | 725·59 | 84·48 | 53·96 | 46·04 | 33·87 | 7·74 | 4·43 | — |
| 1885-86 | 105·98 | 112·23 | 111·79 | 931·18 | 78·93 | 64·15 | 35·85 | 32·26 | 10·16 | — | 6·57 |
| 1887-88 | 112·91 | 106·55 | 122·04 | 1,367·10 | 73·07 | 57·17 | 42·83 | 33·30 | 14·00 | — | 4·47 |
| 1889-90 | 124·30 | 108·19 | 117·94 | 1,400·65 | 71·68 | 52·73 | 47·27 | 29·02 | 13·03 | 5·22 | — |
| 1891-92 | 124·35 | 110·84 | 127·73 | 1,467·74 | 72·35 ‡ | 54·00 | 46·00 | 31·43 | 13·64 | 0·93 | — |

* The figures for 1871–72 are quoted in thousands. The rate is the sterling value of the rupee.
† Excluding the charges in 1879–84 on account of the wars in Afghanistan and Egypt.
‡ In 1892–93 the rate was 64·86, and in 1893–94 it is estimated at 63·78.

From the first part of the table it appears that the net revenue in India, which was Rx. 40,229,000 in 1872, rose by over 24 per cent. in the 20 years following, and, in 1891–92, is returned at Rx 50,023,000. The net expenditure in India on the other hand, though it only once fell below that of the initial year of the above period, rose by no more than 11 per cent, or from Rx. 24,371,000 to Rx. 27,013,000. The net sterling charges again show an increase but little in advance of that of the revenue, but the sterling value of the rupee, as indicated by the rate at which the Secretary of State's bills were sold, receded in nearly the same proportion. The result is seen in the column headed exchange, where the charge, which was Rx. 465,000 in 1871-72, is found to have swelled to Rx. 6,825,000 in the last year of the score herein included.

The second part of the table puts the case in another light. The net expenditure in India absorbed at the beginning of the period in question 60·6 per cent. of the net revenue, leaving a surplus of about 39·4 per cent. In 1891–92, the proportion of the former had fallen to 54 per cent. whilst the surplus had improved to 46 per cent. It is also plain that the sterling charges, comparing together the aggregate of the first three and of the last three years, constitute a burden heavier by no more than 0·6 per cent. in the latter period. On the other hand, the exchange charges, which were insignificant in 1871–2, grew in the twenty years to nearly 13¾ per cent. on the net Indian revenue; and the most marked

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marked leaps in this respect are those between 1883–84 and 1885–86, and between the latter year and its successor in the table. In the case of the former, the amount and the proportion of the sterling charges actually decreased, and the increase in the exchange is explained by the figures relating to the rates fetched by the bills in those years. Now, here we find a surplus of revenue over local expenditure varying between 29 and 47¼ per cent., and the addition of a charge incurred in England which, if paid at the former rate of 2*s.* per rupee, would amount to between 29 and 35 per cent., and would therefore be covered by the balance of the local revenue. This happened, indeed, in 17 of the twenty years included in the table, and the reverse was the case in three only, in each of which considerable expenditure was incurred in India on famine relief. Two of these are shown in the table, the third 1876–77, is one of the alternate years omitted. All charges have thus been eliminated from the account save that of exchange. The table shows that even taking this into consideration, the annual local resources sufficed to liquidate it in all but four years of these quoted, and two of these have been mentioned above as years of special pressure in India. In 1885–86 and 1887–88, too, had it not been for exchange, there would have been a surplus in the former of more than Rx. 1½ million, and in the latter of Rx. 4⅓ millions, which is more than double the amount of the actual deficit. Amongst the years omitted from the table there are two in which there was a deficit, one being a year of famine, and a third year in which the surplus was so small that the results practically amounted to equilibrium. The object in connection with which the above figures have been quoted has now been attained. It has been shown that the revenue in India amply suffices to cover the expenditure there, and would also liquidate the necessary charges incurred abroad, were it not for the difference of the currency. It is unnecesary to carry the matter further, as this review deals with the actuals only, and relegates the forecasts to the succeeding numbers. It is not altogether out of place, however, considering the action that has been taken in connection with this subject since the close of 1891–92, to mention that the revised estimates of 1892–93 take the rupee at 64·86 compared to its value in 1871–72, with an exchange charge of Rx. 9,811,400, and a deficit of Rx. 1,081,900, whilst the first estimates of the current year assume a value of 63·78 on the basis above used, a charge of Rx. 9,814,600, and a deficit of Rx. 1,595,100. In both cases, were it not for the exchange charge, the estimated surplus would amount to Rx. 8,729,500 and Rx. 8,219,500 respectively. The above comments have been purposely restricted to the question viewed from the standpoint of State finance. In the Budget statement of 1891–92, the Member in Council in charge of that branch of administration specially mentioned the dislocation of trade from its ordinary course consequent upon the frequent and violent oscillations of exchange, which made it "profitable for a merchant to abandon his legitimate business, and take to speculation in silver," and this, doubtless, was not the only case of injury to the general interests of the community due to the silver standard.

Financial changes in the decade.

The next topic to come under review is the financial history of the decade. The details of this are adequately set forth in the statement that is annually laid before Parliament, so, as suggested at the opening of this chapter, it is not necessary to give here more than the outlines of the more important changes in system and administration that have been effected during the last 10 years, with their results.

Changes in Taxation.

Taxation is the first subject that calls for notice, and in respect to this, the modifications have been relatively numerous and important. The year 1882-83, in particular, was very fruitful of change, though the innovations then introduced have, to some extent, been neutralised by subsequent measures. For example, the cess on land in the North-West Provinces to provide village accountants and their supervisors, was abolished in consideration of the then apparently stationary condition of the population of that tract, or, at least, its comparatively slow advance in material prosperity. But in 1889–90, financial pressure being unusually great, the Local Government was called upon for a contribution from Provincial revenues to relieve the Imperial funds, and the reimposition of the cess above mentioned provided the means of replenishing the local treasury, which had been thus depleted. Then, again, the duty on salt was dealt with in a somewhat similar manner. In 1882-3 the rates varied in different parts of India. For the most part it stood at Rs. 2½ for 82 lbs.; but in Bengal it rose to Rs. 2·875; in Burma, it was Rs. 0·1875,

and

and varied in the Trans-Indus tracts of the Punjab, from Rs. 0·156 to Rs. 0·25. Previous experience had shown that it is more profitable, from a financial point of view, to levy a moderate duty on a maximum, than a higher duty on a restricted, consumption, so whilst the rates in Burma and Kohat were respectively maintained, that throughout the rest of the country was reduced to Rs. 2 per maund (82 lbs.). This measure was expected to afford some relief to the poorest classes from almost the only State burden to which they are subjected and no doubt this object was realized, as consumption rose in India, excluding Burma, from 1,051,357 tons in 1882-83 to 1,178,750 tons in 1886-87. In the financial year 1887-88, however, exchange dropped, the state of Burma did not allow of reductions in military expenditure there, and the Government of India was consequently again face to face with the question of taxation. It was determined accordingly, to revert to the former duty of Rs. 2½ on salt in India proper, and to raise that on salt for Burma from Rs. 0·1875 to one rupee from the middle of January 1888. This course had been anticipated in 1882, in the contingency of a further fall in the gold price of silver. The immediate result was not ascertainable, so far as the general consumption is in question, because owing to a baseless rumour telegraphed from London, announcing the veto by the Secretary of State of the enhancement of the duty, local dealers and their agents refrained for some time from removing salt from the State depôts, and it is mainly on these removals that the consumption is estimated. Subsequent returns, however, proved that the increase in the rate had ultimately had an appreciable, though slight, effect on the consumption, and that in the course of the year the latter had regained lost ground, and represented the same mean rate per head of the increased population as before the enhancement, with a material benefit to the public Treasury. In the next year (1888-89) a Customs duty on petroleum imported into India and Burma was imposed, as the great extension of the use of this article rendered it possible for the State to be more successful than it had been some years before in the United Kingdom in obtaining *ex luce lucellum*. The gain in question was indeed but small; nevertheless, it substantially relieved local resources, and the low rate at which it was levied precluded any material addition to its retail price. This is shown by the continuous rise in the amount imported since the imposition of the duty. Reverting to the year 1882-83, we find that the pass duty on Malwa opium, that is, the article prepared in Central India from the poppy cultivated under the Protected States in that Agency, was reduced in July from Rx. 70 to Rx. 65 per chest, owing to the gradual decline of the Bombay export demand. In July 1890 a further reduction of Rx. 5 was made, and the pass-duty fixed at Rx. 60. The subsequent transactions were irregular, and dependent probably rather upon the crops than the fiscal change above-mentioned. The year in question is noteworthy, finally, for the abolition of the general import duties, those only being retained which fall on special goods, such as arms, ammunition, spirits, wines, beer, salt, opium, &c., with the export duty on rice. The main object was to free the trade in cotton piece-goods, in continuation of the policy initiated in 1878, and modified in the same direction in 1879. It was found difficult, on the one hand, to distinguish duty-free goods from those chargeable under the revised tariff, and, on the other, the partial repeal of 1878-79 was found to protect not native against imported goods of this class, but one class of English-made articles against another, whilst in one peculiar case even English goods were protected against Bombay manufactures. The financial position at the time being considered favourable to some remission of taxation, the Government of India selected the import duties in question for the experiment, assuming in the Budget statement of the year, that "the question was essentially one of Revenue." The results, apart from the cessation of delay and embarrassment at the Customs House, were on the whole, favourable to imports, and in no way detrimental to exports of the Indian-made goods. The total remission of taxation made in 1882–83 amounted, according to the estimates, to Rs. 2,860,000, irrespective of the loss of revenue arising from the reduction of the pass-duty on Malwa opium. The next point to consider is the increase in taxation that has taken place, in addition to that on salt and petroleum, and on account of the Patwari cess re-imposed in the North-West Provinces. In the Custom duties, the only change was the increase of the duty on imported

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imported spirits from Rs. 5 to Rs. 6 per gallon in 1890–91, on the grounds that it was desirable to increase within reasonable limits the cost of intoxicating liquors to the consumer; to check the increasing importation of cheap and deleterious foreign spirits, and to keep the tariff rate above the Excise duty on Indian-made spirits, which had been recently increased in some places, as well as to make a substantial addition to the public revenue. The other main change in the taxation was the substitution, in 1886–87, of the Income tax on non-agricultural occupations and means of subsistence for the Licence Tax. This course gave an additional net revenue of some Rs. 765,000. The Licence Tax had not been introduced into Lower Burma, and as there was no basis for the assessment lists, and local inquiry was difficult, because the district staff had been largely depleted to supply officers for Upper Burma, it was decided to exempt this Province from the operation of the new impost. In 1888–89, however, the latter was extended to the chief towns of the Lower Division. Taking, then, the ten years as a whole, the estimated result of the variations in taxation has been as shown in the margin, but for the falling-off in the Malwa pass-duty there is no definite information on record. The figures are, of course, only approximate, since it is not justifiable to assign to each cause a numerically exact result, and the variations under each head will be dealt with in more detail later on in the chapter.

| Impost. | Remitted. | Imposed. |
|---|---|---|
| | Rx. | Rx. |
| Patwari Cess (N. W. Provinces) | 241,000 | 250,000 |
| Import Duties | 1,219,000 | 200,000 |
| Salt Duty | 1,400,000 | 1,725,000 |
| Income Tax | — | 765,000 |
| TOTAL | 2,860,000 | 2,940,000 |
| Net Result | — | 80,000 |

Imperial and provincial finance.

The changes in the financial relations between the Imperial and the Provincial Governments are the next to be considered. These, too, have been frequent and important during the period under review. Without entering into the history of the present system on which various branches of the revenue and expenditure have been decentralised, it may be remarked that in December 1870 the first steps were taken to give the Provincial Governments larger powers and responsibilities in respect to the public expenditure in certain civil departments. The local authorities, it was arranged, should have a direct interest in the economical administration of those branches of their resources and at the same time relieve the Imperial finances from a portion of the burden thrown upon them. Thus, in order to introduce the scheme, some initial demand had to be made on the local resources, though this was made as small as possible. In 1877 the system was further developed, but the Provincial Governments had still to make good for themselves the excess of assigned expenditure, if any, over assigned revenue. In 1879 Burma and Assam were brought more fully under the scheme, but with the material modification that in place of a fixed assignment to make good the difference between the provincialised expenditure and revenue, a grant was made of a share in the revenues reserved to the Imperial Government of the land revenue, namely, in Assam, and the land and forest revenue, and salt and rice duties in the other Province. In 1882 the arrangements came again under revision, and the opportunity was taken to substitute for the original plan that adopted three years before in respect to the two smaller Provinces, thus giving the Local Government a direct interest not only in the provincialised revenue, but also in the most important item of Imperial revenue raised within their territory, since, except in Burma, where forest and salt shared the charge, the revenue from land bore the burden of balancing the accounts when necessary. The results, roughly speaking, were to provincialise, or decentralise, if the term be preferred, the administration of a control over three-fifths of the revenue and one quarter of the expenditure of British India. Other provisions were also made regarding the respective responsibilities of the two financial authorities in relation to war and famine, and as the prospects were for the time being favourable to the Public Treasury, the Imperial Government replaced at the disposal of the Provincial Governments a sum of Rx. 670,000, contributed by the latter

latter during the pressure caused by the Afghan War, and remitted, also, a net sum of Rx. 26,000 per annum for the five years during which the above arrangements were to last. On the expiration of the latter term in 1887-88, when the revision of the relations was again undertaken, provision was made for the contribution by the Provincial Governments, in cases of emergency, of a proportionate share of the revenues of which they had the general disposal. A Committee specially appointed to examine the financial position had previously examined in consultation with the local authorities the details of revenue and expenditure in every Province, so that the Government of India was in a position to judge more accurately than on the former occasion of its financial position and resources. The general result of the revision, accordingly, was to transfer an annual sum of Rx. 640,000, or, allowing for increased grants, a net sum of Rx. 550,000, from Provincial to Imperial revenues, the estimate being based upon the increased receipts under the different main heads, and making due allowance for increased provincial demands. Roughly speaking, two-thirds of the said increase went to the Imperial, and the rest to Provincial Governments. Lower Burma and the Panjab escaped being thus taxed. In the former, circumstances were adverse to the alteration of the terms of the previous agreement, which, moreover, did not adequately provide for the new demands made upon it. In the Panjab too there were special reasons for lenience, and the Imperial assignment to the Provincial funds was raised instead of being diminished. In 1884-85, to go back a little, the Government of India decided to prescribe a minimum balance for each Government, and at the opening of 1887-88, there was a very considerable surplus in all treasuries save those of Burma and Bengal. As the decrease in the gold price of silver and the increase of military demands grew more serious, it was pointed out that under the existing arrangements the Local Governments remained free from financial straits, whilst the Imperial Government was passing through a stage of acute embarrassment. A special contribution was accordingly levied from all Provinces except the Panjab, amounting in the aggregate to Rx. 740,000, to be paid in 1889-90. In the case of the North West Provinces, the proceeds of the re-imposed tax to provide for village accountants, &c., were assigned in compensation; and in Lower Burma, the finances had so far improved that the contribution in question was really no more than the resumption of the special grant made from Imperial funds at the revision of 1887-88. In these two Provinces, therefore, the contribution was to be annual, but in the rest the demand was made once for all. The effect of the call, however, was virtually to terminate the current agreements, but still, the five years for which the arrangements of 1887-88 were to last were allowed to expire without further modification of the terms on which the relations between the Imperial and the Provincial finances were based. The new arrangements came into operation from 1892-93. They are framed on the same general lines as those which preceded them, though differing in detail. For instance, the arrangement, as a whole, is a consolidated one, not an aggregate of separate agreements under each head, and the amount required to place in equilibrium, on the basis of existing rates of growth, the revenue and expenditure thus made Provincial is set forth against each Province. The general financial result of the revision was a further resumption by the Imperial Government of the surplus of Provincial receipts to the amount of Rx. 466,300, which represents about 25 per cent. of the increased revenue that accrued during the currency of the arrangements that expired with 1891-92. It will be seen from the above review that the experience of over twenty years has fully justified the expectations formed in 1870 of the beneficial results of decentralising financial administration and control. The heads of revenue thus assigned to the immediate care of provincial Governments have shown, under the fostering attention of the latter, an almost continuous upward tendency, whilst the position of the Imperial Government, with its increased responsibilities in respect to famine relief and military expenditure, has been materially strengthened. The jars that have been experienced more than once in the course of the working of the decentralisation scheme have been due to causes beyond the control of either of the parties to the arrangement, and though temporarily retarding to the development of the country to the full extent desired by the enterprise of the

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the local authorities, have not resulted in any serious injury to what may called the permanent way of provincial finance.

There are a few other points in the financial history of the decade which, though of relatively restricted importance, are worth mentioning in this review.

Stock Notes.

One of them is the attempt made in 1882-83, that *annus mirabilis* of the period in question, to tempt forth the accumulations of wealth, small and large, known to exist in the pockets of the agricultural lieges, even as the corresponding resources were reached in France under the system of *Rentes*. The plan adopted in India was based on a combination of the latter and the American Refunding-Certificate system. Stock Notes not enfaceable to Europe and bearing interest at 4 per cent. payable once a year only, were issued for small sums, under rules calculated to make this form of investment as attractive as possible to small local capitalists and other investors, the object being to attract Indian money, in substitution of that borrowed in sterling in England. After six years' experience it was found that the public did not take kindly to this form of investment, so it was determined to discontinue further sales, and to withdraw, as far as possible, those already taken up, which amounted to Rx. 162,350 in value, by discharging the notes at par, or by substituting for them State Promissory Notes of the 4 per cent. loan of 1842-43. By the end of March 1892 all had been thus withdrawn with the exception of a balance of Rx. 1,433.

Savings Banks.

The failure was from one point of view fully compensated by the continued success and extension of the operations of the Savings Banks. These institutions were first established in 1833, for the three Presidency towns, and from Madras and Bombay their transactions were extended into the interior of those Provinces. But this was not the case with the Calcutta Bank, so in 1870 similar facilities were opened at the District Treasuries in Bengal, and also in Burma and Berar. In 1882, concurrently with these District Savings Banks, corresponding accounts were provided for at the Post Offices of certain grades. The scheme did not take effect in Bombay till a year later, owing to the existence of the vested rights of the Presidency Bank which presented legal difficulties that had to be overcome. The greater convenience of the Post Office arrangement was so highly appreciated by the public that in a short time Postal Banks began to receive or repay deposits at rural as well as district offices, and by the year 1885-86 had gone far to supersede the District Banks, which were accordingly abolished except in the Presidency towns. The marginal statement shows the development of this branch of financial administration. The Postal Banks started in 1883-84 with a higher amount in deposit than the District institutions had in 1881-82, and in nine years have increased that amount more than ninefold. The use made of the Postal Banks, too, by the class for whose benefit they were intended is to be appreciated from the fact that in 1881-82 the average amount of natives' deposits in District Banks was Rs. 33 7, and in 1891-92, in the Postal Banks, Rs. 14·9, or less than half In like manner, those of European and Eurasian depositors have fallen from Rs. 60·0 to Rs. 17·2. The same feature, in a less degree, is traceable in the accounts of the Presidency Banks, where the average amounts were respectively Rs. 36·6 and 39·4 in 1881, and had fallen to Rs. 25·4 and 32·2 ten years later. Not only, therefore, has thrift been encouraged by this measure in tracts where it had previously been unknown, but it has reached a class which had hitherto never even thought of practising it. The Postal-Service Insurance and Annuity Scheme, which was initiated shortly after the Banks, for the persons employed in that department, did not meet with so favourable a reception.

| | District Banks. | | Post Office Banks. | | |
|---|---|---|---|---|---|
| | 1881-82. | 1886-87. | 1883-84. | 1886-87. | 1891-92. |
| Native Depositors - - - | 15,651 | 9,145 | 76,438 | 134,796 | 411,907 |
| European ditto - - - | 3,326 | 1,473 | 8,410 | 20,213 | 51,546 |
| Total Number - - - | 18,977 | 10,618 | 84,848 | 155,009 | 463,453 |
| Interest accrued - | 25,692 | 12,805 | 18,722 | 68,426 | 240,891 |
| Balance at account - - | 727,892 | 292,655 | 751,445 | 2,254,589 | 7,059,316 |

Account System.

We next come to a few changes in the method of account and allied subjects to which attention was called just before the beginning of the period under review, or within the last ten years. In the first place, owing partly to the severance of the military system of finance from the rest, a serious error in the Budget calculations had occurred in 1880-81, and to prevent the recurrence of similar mis-

misunderstandings it was decided in 1881–82 to treat issues from Civil Treasuries for military services as expenditure, in accordance with the practice in England as regards Exchequer issues. The Military Accountant General, too, was brought into touch with the Secretariat by assigning him the position of a Deputy Secretary for Finance in that department of the Government of India. Complementary to the above arrangements was the introduction of a system of reports of all receipts and expenditure, classified under five heads, to be sent to the Accountant General or Comptroller of the Province at the close of each month, so that ten days after the beginning of the succeeding month the above statement is made available for the whole of British India by the Comptroller General. Then, again, important modifications were made in 1886-87 in the way of dealing in the accounts with the transactions connected with railways and irrigation works, following the view of the Parliamentary Committee of 1884 on Indian Railways. Speaking generally, the distinctive term productive works having been abrogated, the capital expenditure on railways is charged under three heads (*a*) Revenue provided from the Famine Insurance Grant; (*b*) from other Revenue, and (*c*) Expenditure not charged against Revenue. The revenue account of railways was similarly simplified and made more explanatory of the financial effect of the policy of the Government of India with regard to these undertakings. Irrigation works were brought under the same system, both as to their capital and their revenue accounts. Into the results of the deliberations of the Railway Committee above mentioned it is not necessary to enter, as they were reported to Parliament at the time, and will be found fully set forth in the Budget Statement of 1885–86. The programme then settled has had, moreover, to be modified to some extent in consequence of the continued fall in the gold price of silver by which the results of the working of railways in India are obviously affected very seriously. Finally, in regard to the form of accounts, the change that was made in those for 1884-85 of showing the results of the payment of sterling obligations under each head in rupees is of sufficient importance to justify a few lines of comment. The error of assuming in the accounts in question that ten rupees were the equivalent of 1*l.* grew more serious, of course, as the sterling value of the rupee declined and it became more and more uncertain what was the equivalent of the sum thus entered when judged by a gold or silver standard respectively. It was decided, therefore, in 1886 to show the sterling transactions converted into rupees at the actual average rate of exchange for the year, so that the separate entries of loss or gain under the head of exchange are thus restricted to transactions carried out on contract or conceded rates, which vary from the above-mentioned actual rate for the year; transactions, that is, in which the loss or gain is a real one. In the general statement for 1891-92, given at page 191, the new method is adopted, so far as showing against each head the total amount in silver is in question, and the number of rupees that went to make up the difference between the sterling and the silver value of the transaction is shown separately.

Other Special Changes.

There are a few events which have not been mentioned in the foregoing description, but which were by no means without their influence on the financial position. For instance, in 1884 a discussion which had been going on for several years respecting the payments on account of the non-effective charges for British troops serving in India, culminated in a claim by the Home Government, for nearly two-and-a-quarter millions sterling on account of arrears, with a proposal to alter the system under which India discharged each year the capital liabilities. The result was that the surplus in 1883-84 which would otherwise have amounted to Rx. 1,271,400, was thus reduced by a million, and the remainder of the arrears, so far as admitted, was paid in the following year, as the liability for pension granted before the 1st April 1884 had thus been defrayed; the amount payable in subsequent years was at first very small, but is annually increasing. Then, again, the Opium Convention with China, under which an import duty (Li-kin) was substituted for the transit duties previously levied at various internal territorial barriers, gave rise to a considerable fall in the price fetched for Bengal opium in 1886-87, which was continued through nearly half the next year. Afterwards, however, the rate somewhat revived, but not enough to indicate thorough confidence in the ability of the Chinese authorities to enforce their prohibition of the levy of the internal transit charges nominally abolished. Such has been the course of events between the financial years 1881-82 and 1891-92, and the ground is now cleared for the consideration of the main items that go to make up

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up each year's revenue and expenditure. It is proposed to here deal with these alone, and to leave the receipts and disbursements not falling within the revenue account to be treated of later. It is to be understood, moreover, that subjects such as those of land revenue, excise, salt, and so on, are here considered simply from a financial, as distinguished from an administrative, standpoint. The latter forms the subject of the next chapter.

Relative position of main heads of revenue and expenditure.

The first step in dealing with this topic is to indicate the relative place of each item in the revenue or expenditure of the year, and for this purpose it is desirable to use the net figures; to consider, that is, the revenue heads after deducting the direct charges made upon them; and the expenditure, when the receipts under each department have been set off against it. The gross figures, accordingly, need only be used where the difference between them and the net results is very wide, or where the incidence of the revenue on those who contribute towards it is in question. The consideration of the latter point can be deferred with convenience until the different sources of revenue have been reviewed. As to the former, the table below, which relates to the first, middle, and last years of the decade respectively, will show the relative importance of each main head of revenue, first, as levied; secondly, in its financial aspect:—

COMPARATIVE STATEMENT OF REVENUE AND EXPENDITURE.

| A.—REVENUE. | Percentage on the Gross Revenue. | | | Percentage on the Net Revenue. | | | Percentage of Charges on the Gross Revenue. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1881–82. | 1886–87. | 1891–92. | 1881–82. | 1886–87. | 1891–92. | 1881–82. | 1886–87. | 1891–92. |
| Land | 40·91 | 42·32 | 40·27 | 41·60 | 43·71 | 40·16 | 13·90 | 15·18 | 16·28 |
| Opium | 18·38 | 16·41 | 13·46 | 17·18 | 13·89 | 12·31 | 20·88 | 30·52 | 23·23 |
| Salt | 13·75 | 12·22 | 14·51 | 15·07 | 13·73 | 16·29 | 7·22 | 7·77 | 5·76 |
| Stamps | 6·30 | 6·88 | 7·16 | 7·09 | 7·95 | 8·16 | 4·59 | 5·12 | 4·37 |
| Excise | 6·39 | 8·03 | 8·60 | 7·29 | 9·43 | 9·80 | 3·39 | 3·54 | 4·30 |
| Provincial Rates | 5·40 | 5·51 | 5·89 | 6·22 | 6·58 | 6·88 | 2·35 | 1·93 | 1·83 |
| Customs | 4·39 | 2·29 | 2·86 | 4·61 | 2·42 | 3·04 | 11·35 | 13·16 | 10·76 |
| Assessed Taxes | 1·00 | 2·49 | 2·78 | 1·09 | 2·86 | 3·22 | 7·82 | 5·68 | 2·73 |
| Forests | 1·63 | 2·03 | 2·50 | 0·69 | 0·86 | 1·28 | 64·07 | 65·31 | 57·01 |
| Registration | 0·53 | 0·55 | 0·67 | 0·23 | 0·25 | 0·38 | 63·51 | 62·21 | 52·25 |
| Tributes | 1·32 | 1·27 | 1·30 | 1·56 | 1·55 | 1·55 | — | — | — |
| *Deduct, Assignments and Compensations* | — | — | — | *—(2·63)* | *—(3·23)* | *—(3·07)* | — | — | — |
| TOTAL REVENUE | *100·00* | — | — | *100·00* | — | — | *15·34* | *17·89* | *16·04* |

| B.—EXPENDITURE. | Percentage on the Gross Expenditure. | | | Percentage on the Net Expenditure. | | | Percentage of Receipts on Disbursements. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1881–82. | 1886–87. | 1891–92. | 1881–82. | 1886–87. | 1891–92. | 1881–82. | 1886–87. | 1891–92. |
| Interest | 7·61 | 6·40 | 5·44 | 9·44 | 8·17 | 6·94 | 18·69 | 15·55 | 20·37 |
| Post Office, Telegraph, and Mint | 2·82 | 3·18 | 3·06 | 0·75 | 0·26 | *(0·29)* | 82·55 | 94·50 | *(6·95)* |
| Civil Departments | 17·44 | 18·35 | 17·46 | 22·99 | 25·22 | 24·64 | 13·68 | 11·51 | 11·95 |
| „ Miscellaneous | 7·05 | 6·98 | 6·35 | 8·77 | 8·65 | 8·38 | 18·57 | 18·04 | 17·80 |
| Famine, Relief and Insurance | 2·46 | 0·46 | 1·60 | 3·75 | 0·69 | 2·56 | — | — | — |
| Railways (*Construction charged against Revenue*) | 0·80 | 0·27 | 0·21 | 1·23 | 0·41 | 0·33 | — | — | — |
| Railways (*Revenue Account*) | 17·49 | 23·25 | 25·52 | 0·68 | 2·67 | 0·64 | 97·45 | 92·42 | 98·44 |
| Irrigation ditto | 3·21 | 3·43 | 3·71 | 1·36 | 1·47 | 1·36 | 72·92 | 71·71 | 77·15 |
| Roads and Buildings | 7·90 | 7·22 | 7·82 | 10·64 | 10·04 | 11·28 | 11·83 | 14·00 | 10·10 |
| Army Services | 30·92 | 28·98 | 28·07 | 36·76 | 41·61 | 43·43 | 21·90 | 5·05 | 3·51 |
| Special Defence Works | — | 0·48 | 0·76 | — | 0·73 | 1·22 | — | — | — |
| *Provincial adjustment* | — | — | — | 3·63 | 0·80 | *(0·49)* | — | — | — |
| TOTAL EXPENDITURE | *100·00* | — | — | *100·00* | — | — | *34·50* | *33·87* | *37·63* |

Considering

A. Revenue.

Considering first the gross revenue, it appears that out of every hundred rupees paid by the people about forty are levied on the land, Opium and salt come next, at a long distance however, and the two have changed places in the ten years dealt with, opium having descended, it seems, more than salt has risen, relatively to the figures of 1881. There is then another wide gap in the return, on the further margin of which Excise is found, with Stamps and Provincial Rates not far distant. A third chasm, wider in the later years than in the first of those shown, lies between the above and Customs. Owing to the changes in the tariff, to the expansion of the Licence Tax, with its maximum fee, to the Income Tax, where the rate bears direct proportion to the revenue, and the extended area and improved condition and administration of the State Forests, these three heads lie pretty close together in the last year specified. In the next section of the table the positions are considerably altered, and in explanation of the change it will be as well to consider first the last three columns. Here is shown the proportion borne to the gross revenue under each head by the cost of collecting it; the difference, that is between the gross and the net receipts. It may be noted that in the two departments not maintained specially or primarily for revenue, namely, the Forests and Registration, the charges exceed half the gross receipts, and in both cases the ratio is decreasing with the rise of receipts, even though the actual expenses may be greater than ten years ago. The opium revenue stands on a different footing, as in the case of the larger portion of it, the cost of production and not only of collection, is involved. In a good year, therefore, the charges are heavier, as more of the raw material has to be paid for by the State, and the benefit is not reaped until perhaps some seasons afterwards, when the surplus stock serves to keep the market steady. The table, therefore, as it deals with these detached periods, is in this respect devoid of information of any significance. The next most costly branch of the revenue, according to the figures herein dealt with, is that of Land Revenue. This, however, as has been explained earlier in the review, comprises the greater part of the detailed administration of the country, and, in addition to the salaries and other expenses of district and sub divisional officers with their office establishments, large items are shown against the pay of village servants in the Panjab and the two Presidencies, and against surveys for revenue purposes, with the cost of settlement operations. Customs duties, though now yielding a relatively small return, involve the maintenance of a large establishment for commercial purposes, such as the registration of trade and supervision of the working of special Acts, as, for instance, that relating to merchandise marks. It is scarcely necessary to enter into the smaller items, beyond remarking that the Provincial rates are very largely collected along with the Land Revenue, and the proportion of cost to gross levy in the case of assessed taxes has fallen in obedience to the large increase in the former consequent on the change of taxation in 1886-87. Returning to the columns dealing with the net revenue, it will be seen that six of the eleven heads occupy the same relative positions in 1891-92 as they did in 1881-82. Opium now falls below salt, a result which is due to a great extent to the rise in duty on the latter since 1887, and the income-tax has brought up that branch of the revenue to the seventh instead of the ninth place. Customs duties and tributes have each fallen in the course of the redistribution. Exchange, it should be borne in mind, enters hardly at all into this portion of the accounts.

B. Expenditure.

But it is otherwise when we come to deal with the expenditure figures. The exchange is here distributed over the different heads in the proportions for 1891-92, shown in the margin. Railway transactions involve a contribution of 35 per cent., and those relating to the Army, of 28. The interest on loans is the next item of importance, and, finally, we have the pension and leave charges. Roughly speaking, two-thirds of the exchange is found to be connected with the loans, effective forces, and railways, and one-fourth with the non-effective allowances, civil and military. In regard to net expenditure, the Army,

| Head. | Percentage. |
|---|---|
| Army, Effective | 15 |
| „ Non-effective | 13 |
| Railway charges | 35 |
| Interest | 16 |
| Pensions, &c. | 13 |
| Other Heads | 8 |
| | 100 |

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Army, as a whole, stands permanently in the foreground, with over 43 per cent. of the total charges, against about 37 in 1881-82. The cost of Civil Departments, also, has risen from a proportion of 23 to one of 25 per cent., on the same basis. Public undertakings, such as roads and buildings, with 11¼ per cent., come next, after a long interval, and the miscellaneous civil expenses, which include pensions, &c., though high in the list, have slightly decreased in their ratio. It is the same with the Interest not included in the Railway and Irrigation accounts. These last heads have made a staunch fight against the adverse course of silver, and the former all but cover their expenses, and the latter show a return more than equal to three-fourths of theirs. Then, again, the head which combines the transactions of the Post Office, Telegraph, and Mints, from being a charge has become a source of revenue. In the last section of this portion of the table under review, the proportion of earnings on gross charges is given, and it will be seen that, on the whole, nearly 37⅔ per cent. was recovered in 1891-92 against 34½ ten years ago. The Post Office and allied departments gained 7 per cent. in excess of their expenses. The Railways, on their revenue account, recovered 98, and the Irrigation Works 77 per cent. Interest, again, was reduced by over a fifth, through decreased expenditure. The receipts towards pension, &c., and under the Civil Departments are necessarily small compared to the charges, whilst those credited to Military and Marine Services have been already stated to come chiefly under the heads of Commissariat, Ordnance, and Dockyard Work or pilotage, &c. In 1881-82 the high proportion under this head was due to the contribution from the United Kingdom towards the expenses of the Afghan War. As regards the relative position of the different heads of net charges in the first and last years of the decade, respectively, it will be noted that the three largest items remain unchanged. Interest has gone down, whilst Pensions, &c., have come up one place, and the two *quasi*-commercial heads of Railways and Post Office, &c., are the only ones that have moved as much as two places. The proportions of the gross revenue show much greater uniformity, and of ten identical heads, only two, Interest and Pensions, &c., have been shifted at all by change of circumstances.

Net Revenue.

We may now pass from the consideration of the above financial items in their relation to the Budget as a whole, to another point of view, from which they are seen individually, and the course of each during the last ten years can be traced. Here the gross figures are not in question. The sketch given above has shown that of the ordinary heads of revenue only in the case of Excise and Land Revenue has the ratio of charges shown any disposition to rise, since the opium expenditure for a single year, however important it may be in reference to the cultivation of the poppy, is devoid of statistical significance. The net figure, accordingly, under each head, is what it is more profitable to set forth, whether it be of revenue or of expenditure. This is done in the table given on the following page. It must be remembered that Upper Burma was brought on to the books from 1886-87, though the net results of the acquisition as a whole have not yet been on the revenue side of the account. The bearings of the figures will be better appreciated when they are thrown into proportional form; and this is done more conveniently in dealing with each item separately.

Total Revenue.

But as a standard is required whereby the course of finance can be judged, the year 1881-82 has been selected, and before dealing with the different heads of revenue it is as well to see what have been the fluctuations of the net revenue as a whole. The marginal table accordingly gives these in relation to the year above mentioned, which is represented as 100. The remissions of 1882-83 brought down the figure considerably for four years, and in the sixth began the fresh taxation, accompanied by the occupation of Upper Burma, which, however, operated against the revenues for some time. The upward course has, on the whole, been steady since 1884-85, except in the case of 1890-91, when opium suffered a notable decline and the revenue from forests fell off from the abnormal figure of the preceding year.

| Year. | Variation. |
|---|---|
| 1881-82 | 100·0 |
| 1882-83 | 93·5 |
| 1883-84 | 95·7 |
| 1884-85 | 91·4 |
| 1885-86 | 93·8 |
| 1886-87 | 98·5 |
| 1887 88 | 99·8 |
| 1888-89 | 102 3 |
| 1889-90 | 109·9 |
| 1890-91 | 108·6 |
| 1891-92 | 110·0 |

## Actual Net Revenue and Expenditure, including Exchange.

| Head. | 1881-82. | 1882-83. | 1883-84. | 1884-85. | 1885-86. | 1886-87. | 1887-88. | 1888-89. | 1889-90. | 1890-91. | 1891-92. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.—Net Revenue: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land | 18,896,105 | 18,741,980 | 18,811,104 | 18,420,283 | 19,130,307 | 19,556,263 | 19,654,610 | 19,456,300 | 20,302,190 | 20,318,631 | 20,066,158 |
| Opium | 7,803,001 | 7,216,084 | 7,700,807 | 5,849,440 | 5,884,625 | 6,213,845 | 6,090,758 | 5,964,365 | 6,977,883 | 5,698,384 | 6,150,555 |
| Salt | 6,844,076 | 5,674,954 | 5,663,242 | 6,026,928 | 5,916,195 | 6,141,111 | 6,225,563 | 7,217,318 | 7,739,161 | 8,058,695 | 8,139,036 |
| Stamps | 3,226,262 | 3,209,351 | 3,358,479 | 3,420,082 | 3,469,755 | 3,558,972 | 3,668,582 | 3,729,155 | 3,906,091 | 3,892,479 | 4,076,511 |
| Excise | 3,310,778 | 3,475,348 | 3,714,124 | 3,881,777 | 4,001,665 | 4,219,700 | 4,374,024 | 4,540,999 | 4,704,964 | 4,742,277 | 4,896,812 |
| Provincial Rates | 2,828,534 | 2,612,982 | 2,813,497 | 2,734,604 | 2,907,658 | 2,941,906 | 2,965,215 | 2,977,991 | 3,348,358 | 3,432,943 | 3,438,671 |
| Customs | 2,093,053 | 1,088,746 | 1,016,758 | 868,138 | 1,036,851 | 1,082,357 | 1,181,870 | 1,167,964 | 1,323,210 | 1,562,388 | 1,517,948 |
| Assessed Taxes | 494,877 | 483,983 | 496,905 | 483,937 | 472,800 | 1,277,510 | 1,382,808 | 1,477,514 | 1,553,984 | 1,571,625 | 1,608,520 |
| Forests | 313,821 | 367,363 | 399,272 | 305,355 | 402,560 | 382,706 | 401,880 | 555,184 | 703,353 | 658,580 | 640,999 |
| Registration | 103,666 | 99,642 | 90,972 | 107,248 | 121,593 | 113,092 | 122,899 | 137,077 | 159,709 | 167,888 | 190,576 |
| Tributes from Protected States | 706,873 | 689,935 | 720,487 | 699,017 | 689,575 | 695,415 | 743,597 | 745,233 | 777,707 | 760,421 | 775,961 |
| Deduct,— | | | | | | | | | | | |
| *Assignments and Compensations* | *— 1,194,440* | *— 1,195,087* | *— 1,238,840* | *— 1,275,442* | *— 1,396,537* | *— 1,446,937* | *— 1,468,963* | *— 1,486,235* | *— 1,544,448* | *— 1,510,092* | *— 1,531,860* |
| Total Net Revenue | **45,426,606** | **42,465,281** | **43,546,807** | **41,521,367** | **42,637,047** | **44,735,940** | **45,342,843** | **46,482,865** | **49,952,162** | **49,354,219** | **49,969,887** |
| B.—Net Expenditure: | | | | | | | | | | | |
| Interest | 3,950,841 | 4,070,945 | 3,668,508 | 3,908,432 | 3,631,879 | 3,639,855 | 4,695,199 | 3,870,437 | 3,367,762 | 3,264,254 | 3,435,733 |
| Post Office, Telegraph, and Mint | 314,584 | 240,667 | 360,719 | 347,403 | 327,101 | 117,780 | 26,283 | *— 98,315* | *— 109,120* | *— 255,077* | *— 146,548* |
| Civil Departments | 9,615,295 | 9,609,502 | 9,933,805 | 10,370,023 | 10,816,283 | 11,236,858 | 11,410,622 | 11,505,582 | 11,679,034 | 11,774,192 | 12,197,685 |
| Miscellaneous Civil | 3,667,403 | 3,658,936 | 3,556,220 | 3,592,044 | 3,556,789 | 3,852,783 | 3,155,022 | 3,091,598 | 3,549,874 | 3,751,389 | 4,149,338 |
| Famine Relief and Insurance | 1,567,886 | 1,495,972 | 1,522,813 | 1,548,357 | 1,500,000 | 309,020 | 91,408 | 78,336 | 600,000 | 600,000 | 1,268,319 |
| Railways, *Construction out of Revenue* | 512,655 | 480,923 | *— 176,295* | 263,501 | 632,055 | 183,077 | 80,945 | 22,401 | 4,974 | *— 4,812* | 163,233 |
| Railways (*Revenue Account*) | 285,584 | 1,305,860 | 304,912 | 1,051,175 | 731,713 | 1,188,668 | 2,122,386 | 2,233,392 | 1,852,601 | 687,291 | 315,864 |
| Irrigation Works | 568,897 | 716,027 | 547,200 | 573,009 | 715,469 | 653,949 | 747,372 | 722,246 | 661,629 | 569,550 | 672,979 |
| Roads and Buildings | 4,450,790 | 4,778,915 | 5,258,654 | 4,394,180 | 3,869,695 | 4,474,193 | 4,858,711 | 4,705,979 | 4,761,791 | 5,081,618 | 5,581,628 |
| Army Services | 15,377,428 | 16,635,323 | 17,155,473 | 16,148,633 | 19,133,907 | 18,540,039 | 19,357,119 | 19,239,478 | 19,733,107 | 19,904,433 | 21,500,197 |
| Special Defence Works | — | — | — | — | — | 325,626 | 456,017 | 789,595 | 689,481 | 491,837 | 604,848 |
| Provincial Adjustment | + 1,519,792 | *— 1,202,626* | *— 464,679* | *— 288,944* | + 523,882 | + 35,665 | + 370,591 | + 285,118 | + 548,996 | *— 198,627* | *— 240,924* |
| Total Net Expenditure | **41,831,155** | **41,790,444** | **41,667,330** | **41,907,813** | **45,438,773** | **44,557,513** | **47,371,675** | **46,445,847** | **47,340,129** | **45,666,048** | **49,502,352** |
| Surplus or Deficit | + 3,595,451 | + 674,837 | + 1,879,477 | *— 386,446* | *— 2,801,726* | + 178,427 | *— 2,028,832* | + 37,018 | + 2,612,033 | + 3,688,171 | + 467,535 |

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Land.

Taking first the LAND REVENUE, on the same basis as that adopted in the last paragraph, the figures in the margin indicate a slow but steady rise, and this is all that is to be expected, considering not only the nature of the property and the system of assessment, but the intimate connection between the administration of the land and the general administration of the whole country. As to the former, the rent-charge is fixed either permanently or for a term of years, rarely less than thirty; and the revision of rates leads to an increased charge only when the general circumstances of the tract since the last settlement justify the change. The charges, again, vary with the same factor, and as the country advances in prosperity increased expenditure falls upon the State in providing for the expanding administrative needs of the rural population, much of which is defrayed out of this general source of public revenue. It may be observed that the figures here given are, like all those dealt with in this chapter, for the financial year ending with the 31st of March, whereas the administration of the Land Revenue is conducted in accordance with the agricultural system which varies in each Province or subdivision of a Province, but generally ends between July and September. In the next chapter, therefore, the revenue returns furnished by that department do not always agree with those now under review. The same remark applies to several other branches of the administration.

| Year. | Variation. |
|---|---|
| 1882–83 | 99·2 |
| 1883–84 | 99·5 |
| 1884–85 | 97·5 |
| 1885–86 | 101·2 |
| 1886–87 | 103·5 |
| 1887–88 | 104·0 |
| 1888–89 | 102·9 |
| 1889–90 | 107·4 |
| 1890–91 | 107·5 |
| 1891–92 | 106·2 |

Opium.

The next important revenue head is that of OPIUM, regarding which a good deal has been said above, and more will find place in the next chapter. From a financial point of view, the decade has been decidedly unsatisfactory. The marginal table shows that in no year has the figure for 1881–82 been touched, and it may even be said that during the greater part of that period, the net revenue fell below four-fifths, and occasionally below three-fourths, of the standard amount. It must be recollected, of course, that a good year, as has been remarked in a previous section of this chapter, tends to reduce the net receipts, in consequence of the heavy payments that are then made to the producers, but the benefit is reaped later, and the table shows that the trade has been subjected to adverse influences other than over-supply in India.

| Year. | Variation. |
|---|---|
| 1882–83 | 92·5 |
| 1883–84 | 98·7 |
| 1884–85 | 74·9 |
| 1885–86 | 75·4 |
| 1886–87 | 79·6 |
| 1887–88 | 78·1 |
| 1888–89 | 76·4 |
| 1889–90 | 89·4 |
| 1890–91 | 73·0 |
| 1891–92 | 78·8 |

Salt.

The SALT revenue, again, is a subject which can best be treated in the next chapter in its connection with the administration. Its main importance lies in the fact that it is not only a tax to which the masses are accustomed from long usage, but it may be said to be the only means whereby a large proportion of the population contributes in the least degree towards the administration whereof it shares the benefits. The results of the financial dealings with this source of revenue during the decade can only be discussed along with the statistics of prices and consumption later. The marginal table just shows that a rise in consumption followed, at a rather unexpectedly long interval, the decrease in the rate of duty in 1882–83 in most parts of India. On the other hand, the results on the revenue of the raising of the duty to a higher rate in the beginning of 1888 were apparently prompt and well marked.

| Year. | Variation. |
|---|---|
| 1882–83 | 82·9 |
| 1883–84 | 82·7 |
| 1884–85 | 88·1 |
| 1885–86 | 86·4 |
| 1886–87 | 89·7 |
| 1887–88 | 90·9 |
| 1888–89 | 105·4 |
| 1889–90 | 113·1 |
| 1890–91 | 117·7 |
| 1891–92 | 118·9 |

Excise.

Taking the EXCISE revenue next, it may be remarked in anticipation, again, of the next chapter, that the net results of the 10 years' administration have the distinction of being the only ones that have been continuously above the standard of 1881–82. Others, such as those connected with stamps, registration, and forests, have nearly approached this level, but excise alone has achieved it. Then, too, it will be seen that the surplus over expenditure has been steadily increasing, without a single year of retrocession. This result is due, on the whole, to severer taxation and to more successful efforts in the prevention of the illicit manufacture and sale of alcoholic liquor to which a good many classes of the Indian community are

| Year. | Variation. |
|---|---|
| 1882–83 | 104·9 |
| 1883–84 | 112·2 |
| 1884–85 | 117·2 |
| 1885–86 | 120·9 |
| 1886–87 | 127·5 |
| 1887–88 | 132·1 |
| 1888–89 | 137·1 |
| 1889–90 | 142·1 |
| 1890–91 | 143·2 |
| 1891–92 | 147·9 |

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are so notoriously addicted. In most of the northern and eastern provinces the system of administration has been, as far as possible, assimilated during the decade to that of Madras and Bombay, where the results have been highly successful in attaining the object for which the reforms of some years back were introduced.

Stamps.

STAMP revenue has risen almost as continuously as excise, but far less rapidly. The largest item under this head is that of Court fees, which has been already mentioned in a previous chapter in connection with litigation. The use of both this class of stamps and that prescribed for commercial and other transactions varies considerably with the season. In a bad year, such as occurred in Southern India in 1890–91, the demand for court fees recedes with the prevalence of litigation, and there is less borrowing for marriage ceremonies and the like, so that bonds pass with less frequency.

| Year. | Variation. |
|---|---|
| 1882–83 | 99·5 |
| 1883–84 | 104·1 |
| 1884–85 | 106·0 |
| 1885–86 | 107·6 |
| 1886–87 | 110·3 |
| 1887–88 | 113·7 |
| 1888–89 | 115·6 |
| 1889–90 | 121·1 |
| 1890–91 | 120·6 |
| 1891–92 | 126·4 |

Provincial Rates.

The largest item that is included under the head of PROVINCIAL RATES is the general cess for local purposes, which has been described in Chapter V. above. Then come the cesses for village services, such as those for accountants, &c., in the North West Provinces and Panjab, and for corresponding functions in Madras and the Central Provinces. In Bengal there is a special cess for roads and schools, as well as one for the district postal service, yielding a smaller revenue. The restoration of the Patwari cess in the North West Provinces appears to be the main cause of the sudden rise in the revenue from 1889–90 onwards.

| Year. | Variation. |
|---|---|
| 1882–83 | 92·4 |
| 1883–84 | 99·4 |
| 1884–85 | 96·7 |
| 1885–86 | 102·8 |
| 1886–87 | 104·0 |
| 1887–88 | 104·8 |
| 1888–89 | 105·3 |
| 1889–90 | 118·4 |
| 1890–91 | 121·4 |
| 1891–92 | 121·6 |

Customs.

The CUSTOMS revenue is necessarily considerably below that of 1881–82 all through the decade, owing to the abolition of the duties on cotton and other imports from 1882–83. For the last few years the duty on petroleum and the increased rate of that on spirits have somewhat raised the amount. These articles and rice, on which the export duty is considerable in Burma and Bengal, practically comprise the bulk of the dutiable trade, and the revenue from rice, which is the largest single item, varies according to the harvest in Lower Burma.

| Year. | Variation. |
|---|---|
| 1882–83 | 52·0 |
| 1883–84 | 48·6 |
| 1884–85 | 41·5 |
| 1885–86 | 49·5 |
| 1886–87 | 51·7 |
| 1887–88 | 56·5 |
| 1888–89 | 55·8 |
| 1889–90 | 63·2 |
| 1890–91 | 74·6 |
| 1891–92 | 72·5 |

Assessed Taxes.

The figures relating to the ASSESSED TAXES are of little statistical value when taken in the same way as the rest, in consequence of the change in the character of the chief impost under this head in 1886–1887, and the extension of its application to the towns of Lower Burma two years later. The License Tax, which the Income Tax superseded, seems to have varied in productiveness but little from year to year. As compared with 100 in 1881–1882, the average yield of the four first years of the decade is represented by about 97, but the second year of the new tax gave nearly thrice as much as the latter figure, and by the time the assessment was in good working order, considerably over that multiple of the standard amount had been attained.

| Year. | Variation. |
|---|---|
| 1882–83 | 97·8 |
| 1883–84 | 100·4 |
| 1884–85 | 97·8 |
| 1885–86 | 95·6 |
| 1886–87 | 258·1 |
| 1887–88 | 279·4 |
| 1888–89 | 298·5 |
| 1889–90 | 314·0 |
| 1890–91 | 317·6 |
| 1891–92 | 325·0 |

There remain the two working departments of FORESTS and REGISTRATION. The former falls below the standard in one year only, and from 1888–89 tends towards 100 per cent. in excess of that amount. A considerable part of this increase is due to the forests of Upper Burma, which in 1891–92 yielded a larger true forest revenue than any other tract in India, except the Lower Division of that Province. Bombay shows, indeed, a larger profit, but the greater portion of it is due, not to timber, but to grazing and minor forest produce, such as firewood, charcoal, &c.

| Year. | Forests. | Registration. |
|---|---|---|
| 1882–83 | 116·9 | 96·1 |
| 1883–84 | 127·1 | 87·8 |
| 1884–85 | 97·1 | 103·5 |
| 1885–86 | 128·2 | 117·4 |
| 1886–87 | 121·9 | 109·2 |
| 1887–88 | 128·0 | 118·6 |
| 1888–89 | 176·7 | 132·3 |
| 1889–90 | 223·9 | 154·1 |
| 1890–91 | 209·7 | 162·1 |
| 1891–92 | 204·1 | 184·0 |

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As to Registration, the almost continuous rise in revenue since 1883–84 is more marked than in the case of any other main head, except Forests. The great change seems to have taken place between 1887 and 1889, and has been noticed in a previous chapter as due, in all probability, to a better understanding of the law regarding transfer in Upper and Southern India.

There are only two heads that remain to be mentioned here, Tributes and the deductions on account of Assignments and Compensations. The former is obviously subject to slight and accidental variations only. Some periodical additions followed on the acquisition of Upper Burma with its attached States, but the bulk of the changes from year to year are unimportant. The assignments, &c., are direct charges upon the revenue, but cannot be debited to any particular head, though they refer mainly to the land and salt revenue. It has been already explained that the largest single items are those paid by way of allowances to assignees claiming under grants from the Peshwa's Government, which were taken over by the British with the rest of the liabilities of Maratha rule. There are also a considerable number of cases of compensation in cash for lands resumed from the occupation of managers of temples and other grantees, mostly in the Western Presidency. The next large item is the compensation paid to Chiefs in Rajputana and Central India and to the French and Portuguese Governments for the acquisition of their salt rights, in order to place that source of revenue under uniform administration. Finally, there are a few instances of personal compensation.

| Years. | Variation. | |
|---|---|---|
| | Tributes. | Assignments, &c. |
| 1882–83 | 97·6 | 100·0 |
| 1883–84 | 101·8 | 103·7 |
| 1884–85 | 98·9 | 106·7 |
| 1885–86 | 97·6 | 116·9 |
| 1886–87 | 98·3 | 117·0 |
| 1887–88 | 105·2 | 123·0 |
| 1888–89 | 105·4 | 124·4 |
| 1889–90 | 110·0 | 129·3 |
| 1890–91 | 107·6 | 126·4 |
| 1891–92 | 109·8 | 128·3 |

Expenditure.

We pass now to the variations in the expenditure debited to the revenue account without being charged direct on any of the main heads of receipt. It is obvious that some of the heads are so liable to accidental fluctuation that it is superfluous to show them in a decennial series, which implies a certain uniformity of progress. It is convenient, therefore, to show them all in a single statement, and then to comment on the individual heads which seem to be susceptible of general explanation. The following table is prepared on the same plan as that adopted for the revenue, referring, that is, each year's figures to the corresponding item in 1881–82.

Variation of Net Expenditure from 1881–82.

| Head. | 1882–83. | 1883–84. | 1884–85. | 1885–86. | 1886–87. | 1887–88. | 1888–89. | 1889–90. | 1890–91. | 1891–92. |
|---|---|---|---|---|---|---|---|---|---|---|
| Interest | 103·0 | 92·8 | 98·9 | 91·9 | 92·1 | 118·8 | 97·9 | 85·2 | 82·6 | 86·9 |
| Post Office, Telegraph and Mint | 76·5 | 114·7 | 110·4 | 103·9 | 37·4 | 8·3 | *—31·2* | *—34·7* | *—31·1* | *—46·6* |
| Civil Departments | 99·9 | 103·3 | 107·8 | 112·5 | 116·8 | 118·7 | 119·6 | 121·4 | 122·4 | 126·8 |
| Miscellaneous Civil | 99·8 | 96·9 | 97·9 | 97·0 | 105·0 | 86·0 | 84·3 | 96·8 | 102·3 | 113·1 |
| Famine Relief and Insurance | 95·4 | 97·1 | 98·7 | 95·6 | 19·7 | 5·8 | 5·0 | 38·3 | 38·3 | 80·9 |
| Railways (*Construction charged on Revenue*) | 93·8 | *—34·4* | 51·4 | 123·3 | 35·7 | 15·8 | 4·3 | 0·9 | *—0·9* | 31·8 |
| Railways (*Revenue Account*) | 457·3 | 106·8 | 368·0 | 256·2 | 416·2 | 743·2 | 782·0 | 648·7 | 240·6 | 110·6 |
| Irrigation | 125·8 | 96·1 | 100·7 | 125·7 | 114·9 | 131·4 | 126·9 | 116·3 | 100·1 | 118·3 |
| Roads and Buildings | 107·4 | 118·1 | 98·7 | 86·9 | 100·5 | 109·2 | 105·7 | 107·0 | 114·2 | 125·4 |
| Army Services | 108·2 | 111·5 | 105·0 | 124·4 | 120·6 | 125·9 | 125·1 | 128·3 | 129·4 | 139·8 |
| **Total, Net Expenditure** | **99·9** | **99·6** | **100·2** | **108·6** | **106·5** | **108·4** | **111·0** | **113·1** | **109·1** | **118·3** |
| *Surplus* | 18·8 | 52·3 | – | – | 4·9 | – | 1·0 | 7·2 | 102·6 | 13·0 |
| *Deficit* | – | – | 10·7 | 77·9 | – | 56·4 | – | – | – | – |

Interest.

Interest has been decreasing in net amount for the last three years or so. The conversion of loans into stock bearing lower rates, the extension of the system of State loans and advances in India swells the receipts, which are also affected in

in the same direction by the increase of the fiduciary reserve maintained in connection with the paper currency. The interest paid on the Rupee Debt in 1891–92 amounted to Rx. 4,168,622 and that on the sterling loans to 3,803,159*l.*, to which must be added Rx. 1,651,569 on account of exchange. In both cases a small debit is included on account of discount and commission. The total amount of Rx. 9,623,350 is distributed between the ordinary and the Public Works section, in the proportion of 40 and 60 per cent., as was mentioned in an earlier portion of this chapter. FINANCE

The next item contains three sub-divisions, of which two correspond with the three semi-commercial departments marginally noted. The figures given are those for 1891–92 only. The Post Offices paid their way in India, but had to bear the cost of stores and subsidies in England to the amount of Rx. 138,150. Similarly, the telegraphs in India show a surplus exceeding that given in the margin, and the Indo-European line also worked at a profit, but a slight deficit was caused by the cost of the annuities of the share-holders of the Red Sea line, now abandoned. Both these heads of expenditure will be reviewed in their administrative aspects in a later chapter. The two mints, Calcutta and Bombay, differ considerably from each other in the detail of their accounts, and as their working will not come again under review, it is as well to comment upon it here. The following table shows the main items for 1891-92 which fall under this head in the general account :— Post Office, &c. Mints.

| Head. | Receipts. | Expenses. | Net Results, &c. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| Post Office - | 1,446,355 | 1,493,359 | — 47,004 |
| Telegraph - | 919,335 | 838,720 | + 80,615 |
| Mints - - - | 210,046 | 97,109 | + 112,937 |
| TOTAL - - | 2,575,736 | 2,429,188 | + 146,548 |

| | RECEIPTS. | | | CHARGES | |
|---|---|---|---|---|---|
| | Calcutta. | Bombay. | | Calcutta. | Bombay. |
| | Rx. | Rx. | | Rx. | Rx. |
| Assay Fees - - - - | — | 62 | Establishment and Contingencies. | 30,330 | 27,764 |
| Seignorage on Silver - - | 31,540 | 84,513 | | | |
| Seignorage on Gold - - - | 125 | — | Loss on Coinage - - - | 5,586 | 6,530 |
| Gain on Coinage operations - | 1,341 | 3,705 | Local Stores - - - - | 5,338 | 5,261 |
| Sale of Old Stores, &c. - - | 208 | 83 | Stores, &c. in England, and Exchange on ditto. | 6,438 | 9,862 |
| Miscellaneous - - - - | 4,003 | 635 | | | |
| Gain on Copper Coinage - - | 83,831 | — | TOTAL CHARGES - - | 47,692 | 49,417 |
| TOTAL RECEIPTS - - | 121,048 | 88,998 | Not charged to Mints - - | 806 | 1,314 |

The year 1890–91 was distinguished for the abnormal amount of silver bullion presented for coinage under the operation of causes which are not likely to recur, and the transactions in the following year show a considerable fall. But it must be mentioned that the disturbances in the silver market in the year immediately following the last with which we have here to deal led to much the same results as the inflated imports of 1890–91. The marginal table shows these fluctuations. The last point to note in connection with this head is the character of the coinage turned out at the two mints. Gold and copper are practically confined to the Calcutta institution, and the share of the latter in the smaller silver coins is by far the larger, as the marginal table shows. The foreign copper coins turned out from Calcutta consist chiefly of cents for the Straits Settlements' currency, with a few for Ceylon and the British East Africa Company. The Statistical Abstract shows that in the decade the total value of coinage issued was Rx. 123,508 in gold, Rx. 76,207,477 in silver, and Rx. 1,369,937 in copper. The first is almost entirely from the Calcutta mint, as in 1892, and for the last two years, also, copper has ceased to be coined in Bombay. The annual average value of coinage was

| Year. | Value of Silver Bullion presented for Coinage.* |
|---|---|
| | Rx. |
| 1884-85 - | 5,610,880 |
| 1885-86 - | 8,838,580 |
| 1886-87 - | 3,822,170 |
| 1887-88 - | 7,135,860 |
| 1888-89 - | 6,550,852 |
| 1889-90 - | 8,006,370 |
| 1890-91 - | 12,547,736 |
| 1891-92 - | 6,238,410 |
| 1892-93 - | 12,253,691 |

* These figures do not represent the amount actually coined.

| Coins. | VALUE. | |
|---|---|---|
| | Bombay. | Calcutta. |
| | Rx. | Rx. |
| Gold Mohurs - - - | 5 | 24,786 |
| Gold 10-Rupee pieces - | 3 | — |
| Gold 5-Rupee pieces - | 3 | — |
| Silver Rupees - - - | 4,000,000 | 1,083,219 |
| Half Rupees - - - | — | 105,871 |
| Quarter Rupees - - - | 22,080 | 182,169 |
| Eighth Rupees - - - | 52,870 | 107,761 |
| Copper, British Indian - | — | 147,524 |
| Copper, Foreign - - | — | 18,793 |
| TOTAL VALUE - - | 4,074,961 | 1,670,123 |

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was Rx. 2,980,992 between 1870–71 and 1874–75; between 1880–81 and 1884–85 it rose to Rx. 4,571,542. Five years later it was Rx. 8,459,396, and culminated in the Rx. 13,341,783 of 1890–91.

Civil Departments.

In the next head of expenditure we find a large and continuous increase from the first of the ten years to the last. The marginal table, which gives the gross charges for 1891–92, will serve to explain this, as the chief departments included have been already reviewed in former chapters, where the accounts have been quoted, and the main features in the history of the decade explained. This is the case with the first four items on the list. The educational accounts will receive notice in a later chapter, and meanwhile it may be noted that the receipts from school fees and proceeds of sales of books just fall short of those from pilotage and dockyard work in the marine department. The medical receipts are mainly contributions and fees at hospitals and dispensaries, whilst the main heads of disbursement are those of medical establishments (Rx. 268,466), institutions (Rx. 298,302), sanitation and vaccination (Rx. 174,464) and medical education (Rx. 74,164). The "political" work of the Government in India has been described in the second chapter of this review, and next to the cost of the officers and their establishments at the headquarters of the Agencies or States, the main items are, first, that of political subsidies, and secondly, the maintenance of refugees and State prisoners from Afghanistan and Burma. The minor departments show a miscellaneous collection of receipts, as might be expected, ranging from Rs. 2,000 on account of services rendered by Government bulls and stallions, to Rs. 18,000 from sales of cinchona off the State plantations. Fairs, exhibitions, botanical gardens, &c. account for a good deal of the rest, which also includes a considerable item from Madras, headed "Examination Fees." On the other side of the account the chief items are the Survey of India (Rs. 102,081) and the Census (Rs. 182,082). There are also the charges on account of the Meteorological Department (Rs. 27,200), the Geological Survey (Rs. 18,000), and the heads grouped under the comprehensive term of "Agricultural and Emigration."

| Department. | Receipts. | Charges. |
|---|---|---|
| | Rx. | Rx. |
| General Administration | — | 1,791,317 |
| Law and Justice | 687,140 | 3,739,759 |
| Police | 381,540 | 3,868,610 |
| Marine | 222,414 | 627,951 |
| Education | 211,724 | 1,424,796 |
| Ecclesiastical | — | 161,596 |
| Medical | 63,106 | 884,684 |
| Political | — | 767,711 |
| Scientific and Minor | 90,233 | 587,438 |
| TOTAL | 1,656,157 | 13,853,842 |
| *Net* | — | *12,197,685* |

Miscellaneous Civil.

The head of MISCELLANEOUS CIVIL CHARGES needs no lengthy comment. Like the larger departments, this head shows a growing tendency, though its expansion has been considerably less than in the case of its larger neighbour. The main items included in 1891–92 are shown in the margin, and as there is not much intrinsic variation, in amount from year to year, it is superfluous to give a more extended account. Exchange is now a serious addition to the second and two following items, but the item bearing this title refers simply to transactions on remittances and contract rates, already explained above. The Miscellaneous head again has been described. It includes rents of State buildings, rewards for the destruction of wild animals, donations in charity, unclaimed deposits, and much besides.

| Head. | Receipts. | Charges. |
|---|---|---|
| | Rx. | Rx. |
| Territorial and Political Pensions. | — | 557,959 |
| Civil Furlough | — | 276,362 |
| Superannuation | 361,517 | 3,324,109 |
| Stationery | 83,408 | 602,885 |
| Exchange | 31,529 | — |
| Miscellaneous (Rents, Rewards, Donations, &c.) | 420,830 | 285,307 |
| TOTAL Rx. | 897,284 | 5,046,622 |
| Net Rx. | — | 4,149,338 |

Famine relief and Insurance

The next head requires some explanation, no doubt, but it has been fully dealt with in the different Budget Statements. The general outline of the scheme is to provide an annual sum directly or indirectly for the relief of, or for protection against, famine. The first charge against this assignment is the actual relief of distress, if there be any directly due to famine. The second is that of construction of protective works for communication or irrigation, and finally, any balance that may remain is assigned to the reduction of debt, thus avoiding any permanent increase

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increase of debt through emergencies of the description in question. When the scheme was first initiated it was estimated that every ten years the Government might perhaps be called upon to expend some Rx. 15,000,000 on famine relief, direct or indirect, including loss of revenue remitted during a famine, so that an annual provision of Rx. 1,500,000 ought, if possible, to be made for the purpose. The objects in view were thus purely financial, and may be summarised as the maintenance of a reserve to meet all emergencies, arising directly or indirectly from the liability to famine, detrimental to the financial position of the Government. It was not originally intended to assign any of this reserve for the second purpose specified above, but subsequently the construction of protective lines of communication, and the assistance rendered financially to such lines under construction by other than State agency, were both included in the policy. Financial pressure for some portion of the decade was so great that, as the table under discussion indicates, the famine grant was reduced to a very small amount. From 1889–90, however, it was restored to the extent of more than Rx. 1,000,000, and in 1891–92 the whole amount of Rx. 1,500,000 was provided. Direct relief, fortunately, absorbed but Rx. 23,423. Rx. 484,795 was assigned to the construction of protective railways, and Rx. 77,931 to that of irrigation works. Rx. 231,681 was charged in the Railway Revenue Account on account of the net cost of two large protective railways constructed through the agency of companies, and the balance of Rx. 682,170 was devoted to the reduction of debt.

Railway construction charged on revenue.

The items shown as spent out of revenue on railway construction, in addition to that assigned under the preceding head, are usually distributed between small provincial works. The largest undertaking under this head, for instance, in 1891–92, was the Haidrabad-Umarkot line in Sindh, and in previous years, a similar line from Lucknow by Sitapur to Seramau held this place.

Railway (Revenue Account).

The general subject of railway working in India finds a place under the head of Public Works in a later chapter. In its financial aspect, as has been mentioned above, it is sub-divided into the revenue and the capital account, with the former of which alone we are now concerned. The nature of the account will be best shown by giving a summary of the figures for 1891–92 under heads that will be sufficiently explicit without entering into the great detail over which they are necessarily distributed in the general returns of the Government of India.

The marginal Table provides this information, and shows that the State lines worked at a small profit, the subsidised Companies at an insignificant loss to the State, whilst the latter had to bear a considerable loss on the results of the year in the case of the guaranteed Companies. The part played by exchange in the above adjustments should be noted. In the case of the State lines, the amount due on account of interest and annuities was in all Rx. 8,087,894, out of which Rx. 3,012,015 was payable in silver in India, and the balance of Rx. 5,075,879, in sterling, in England. The exchange on the latter, or the difference between the silver and the gold value of the rupee, amounted to Rx. 1,536,862, so that had the currency retained its former value of two shillings, the net revenue would have reached Rx. 1,646,422. Similarly, the remittance of interest to London on account of the guaranteed railways,

| HEAD. | Accounts, 1891–92. | |
|---|---|---|
| | Revenue. | Expenditure. |
| | Rx. | Rx. |
| A. *State Railways net* | *109,560* | — |
| (1.) Gross earnings and working expenses | 16,411,934 | 8,214,486 |
| (2.) Interest on debt | — | 4,427,960 |
| (3.) Annuities in purchase of Railways | — | 2,428,763 |
| (4.) Interest on advances to Companies | — | 226,497 |
| (5.) Interest on capital deposited by Companies | — | 1,004,674 |
| TOTAL | 16,411,934 | 16,302,374 |
| B. *Guaranteed Companies net* | — | *333,228* |
| (1.) Net traffic receipts | 3,493,118 | — |
| (2.) Surplus profits, land and supervision | — | 756,916 |
| (3.) Interest | — | 3,069,430 |
| TOTAL | 3,493,118 | 3,826,346 |
| C. *Subsidised Companies net* | — | *136* |
| (1.) Repayment of advances of interest | 32,994 | — |
| (2.) Land and subsidy | — | 32,265 |
| (3.) Advances of interest | — | 865 |
| TOTAL | 32,994 | 33,130 |
| D. Miscellaneous surveys and charges | — | 92,060 |
| GRAND TOTAL | 19,938,046 | 20,253,910 |
| Net | — | *315,864* |

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railways, which was augmented by Rx. 918,100 from the same cause, converting a surplus of Rx. 584,872 into the deficit shown in the Table.

It is worth while, therefore, to show the results for the last few years according to the country in which the transaction occurred, with the difference due to the want of uniformity in the currency standard. In the following Table, accordingly, the revenue and expenditure are shown under the heads of India and England respectively, with the addition of the exchange :—

| HEAD. | 1887–88. | 1888–89. | 1889–90. | 1890–91. | 1891–92. |
|---|---|---|---|---|---|
| A. REVENUE. | Rx. | Rx. | Rx. | Rx. | Rx. |
| India | 14,533,033 | 15,520,359 | 16,605,177 | 17,234,698 | 19,936,289 |
| England | 230 | 230 | 293 | 965 | 1,225 |
| *Total* | *14,533,263* | *15,520,589* | *16,605,470* | *17,235,663* | *19,937,514* |
| Exchange | 97 | 107 | 131 | 315 | 532 |
| TOTAL REVENUE | 14,533,360 | 15,520,696 | 16,605,601 | 17,235,978 | 19,938,046 |
| B. EXPENDITURE. | | | | | |
| India | 8,987,477 | 9,471,958 | 10,331,564 | 10,357,861 | 12,145,772 |
| England | 5,399,392 | 5,652,240 | 5,609,417 | 5,702,207 | 5,653,176 |
| *Total* | *14,386,869* | *15,124,198* | *15,940,981* | *16,060,068* | *17,798,948* |
| Exchange | 2,268,877 | 2,629,890 | 2,517,221 | 1,863,201 | 2,454,962 |
| TOTAL EXPENDITURE | 16,655,746 | 17,754,088 | 18,458,202 | 17,923,269 | 20,253,910 |
| *Net Deficit* | *2,122,386* | *2,233,392* | *1,852,601* | *687,291* | *315,864* |

If the Exchange be left out of the account there would have been in the five years a surplus to the extent shown marginally, instead of a deficit of Rx. 7,211,534, since the productiveness of the undertakings has been increasing literally "by leaps and bounds" but is counteracted by the abnormal burden thrown upon them.

| | Rx. |
|---|---|
| 1887–88 | 146,394 |
| 1888–89 | 396,391 |
| 1889–90 | 664,489 |
| 1890–91 | 1,175,595 |
| 1891–92 | 2,138,566 |
| TOTAL | 4,521,435 |

Irrigation Works.

The next head is that of Irrigation Works, which are sub-divided into major, for which capital as well as revenue accounts are kept, and minor undertakings, which are thus treated only in the more important cases. As in the case of railways, we are now dealing with the revenue accounts only, of which the following Table contains the summary for 1891-92 :—

| A. REVENUE. | | B. EXPENDITURE. | |
|---|---|---|---|
| MAJOR WORKS. | Rx. | MAJOR WORKS. | Rx. |
| Direct receipts | 1,404,737 | Working expenses | 761,445 |
| Portion of Land Revenue | 673,189 | Interest on debt | 1,109,678 |
| *Total* | *2,077,926* | *Total* | *1,871,123* |
| MINOR WORKS. | | MINOR WORKS. | |
| *Gross receipts* | *194,114* | *Expenses* | *1,073,896* |
| GRAND TOTAL | 2,272,040 | GRAND TOTAL | 2,945,019 |

But

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But, unlike railways, the Irrigation accounts are not burdened with exchange transactions. It should be noted that under this head canals and tanks are dealt with, whilst wells, a means of irrigation which commends itself equally strongly to the agricultural expert from England and the Indian cultivator, are not constructed directly by the State, though advances to the landholder for their construction are annually made, in varying amounts, from the public funds. The State undertakings, which are of sufficient importance for a capital and revenue account to be kept of them separately, and which are termed major works, show in many cases a much more favourable result than the entire head of Irrigation, since not only is the object in view frequently protection against a general failure of the crops in a bad season rather than the extension of the use of canal water in ordinary years, but also, in the case of the minor works, the cost of their construction is included in the charges against revenue. In a season of normal or excessive rainfall, there is little or no demand for artificial irrigation, except of course in the tracts where, without this facility, it is not possible to keep crops alive at any time. On the other hand, in a year of drought, the demand is keen but the rates for water remain the same, and no market is made out of the peasants' necessities beyond what is set down as within the normal working capacity of the undertaking. In the year succeeding that with which this review closes, for example, and in several years since 1885 86, the demand for water in Upper India has fallen below the Budget estimate, owing entirely to the heavy or seasonable rain supply. The main undertakings in connection with this important branch of State enterprise will be mentioned in the chapter on Public Works. As in the case of railways, the annual provision made for them in the Estimates varies very considerably, a fact which is shown in the Table on page 208.

Roads and Buildings.

The third and last division of the Public Works branch of the administration deals with Roads and Buildings, and the accounts relating thereto are shown accordingly, in considerable detail, in the annual volume. The following Table

| Works. | Revenue. | | | | Expenditure. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | Total. | Imperial. | Provincial. | Local. | Total. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Military - - - | 49,794 | — | — | 49,794 | 1,214,518 | — | — | 1,214,518 |
| Civil - - - | 11,800 | 271,319 | 255,204 | 577,330* | 739,218 | 2,461,115 | 1,651,761 | 4,994,234† |
| TOTAL - - | 61,594 | 271,319 | 255,204 | 627,124 | 1,953,736 | 2,461,115 | 1,651,761 | 6,208,752 |

* Includes Rx. 89,007 received in England, on account of the Royal Engineering College.
† Includes net Rx. 142,140 spent in England.

gives the figures for 1891-92 under the two heads, military and civil. With the former we have dealt cursorily in the preceding chapter. The latter will be similarly treated later on in the review. The marginal Table gives the expenditure for the last five years under the two heads. The normal military grant of Rx. 1,000,000 per annum has been exceeded, chiefly owing to the requirements of Upper Burma, including permanent quarters for troops in the Khyin Hills. The Special Defence Works, which appear in the accounts under a separate head from the year 1886-87, have been sufficiently treated of in the last chapter for the purposes of this review.

| Year. | Military. | Civil. |
|---|---|---|
| | Rx. | Rx. |
| 1887-8 - - | 1,232,060 | 4,218,989 |
| 1888-9 - - | 1,108,206 | 4,202,526 |
| 1889-90 - - | 1,138,463 | 4,273,726 |
| 1890-91 - - | 1,220,676 | 4,510,231 |
| 1891-92 - - | 1,214,518 | 4,994,234 |

Army Services.

There remain, then, the Army Services, which have also received attention, but on which in their financial aspect a few words may be added here. The general table shows that the net amount has been on the rise, though not continuously, since 1885-86, and its increase in 1891-92 over the year taken as the basis of comparison is higher than in the case of any other of the main heads

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heads of the accounts. The following table shows the gross expenditure for the 10 years :—

| Year. | India. | England. | Exchange. | Total. | Effective. | Non-Effective. |
|---|---|---|---|---|---|---|
| | Rx. | £. | Rx. | Rx. | Rx. | Rx. |
| 1881–2* | 13,218,733 | 3,997,482 | 824,685 | 18,040,900 | 14,615,099 | 3,425,801 |
| 1882–3* | 13,239,220 | 3,899,208 | 894,452 | 17,032,880 | 13,487,566 | 3,545,314 |
| 1883–4* | 11,904,292 | 5,017,422 | 1,146,534 | 18,068,248 | 13,146,981 | 4,921,267 |
| 1884–5 | 12,023,629 | 3,974,422 | 965,752 | 16,963,803 | 13,208,192 | 3,755,611 |
| 1885–6 | 15,247,088 | 3,689,380 | 1,161,311 | 20,097,779 | 17,038,664 | 3,059,115 |
| 1886–7 | 14,620,516 | 3,564,166 | 1,340,360 | 19,525,042 | 16,229,677 | 3,295,365 |
| 1887–8 | 15,104,908 | 3,741,015 | 1,572,011 | 20,417,934 | 16,861,488 | 3,556,446 |
| 1888–9 | 14,812,591 | 3,746,205 | 1,743,045 | 20,301,841 | 16,507,312 | 3,794,529 |
| 1889–90 | 14,944,095 | 3,957,703 | 1,776,016 | 20,677,814 | 16,795,436 | 3,882,378 |
| 1890–91 | 14,799,128 | 4,440,125 | 1,450,815 | 20,690,068 | 16,947,521 | 3,742,547 |
| 1891–92 | 15,741,062 | 4,559,513 | 1,980,026 | 22,280,601 | 18,257,495 | 4,023,106 |

* Excluding the charges on account of the wars in Afghanistan and Egypt.

The main points that are prominent in this statement are the rise in exchange and the sudden increase in the effective expenditure in 1885–86. Regarding the first, enough has been said already when dealing with the general subject. The second, it may be noted, was mainly due to the expenditure of Rx. 2,188,400 on the Quetta Field Force, and was not followed up in the years immediately succeeding, but there appears another considerable increase, more especially in the Indian charges, at the end of the decade. In 1883–84 the Home charges were swelled by the payment of a million sterling on account of the arrears of non-effective services, a transaction which is also very prominently indicated in the last column of the table, and, of course, in that relating to exchange. Although the matter is not one which falls within the scope of this review, it is not quite out of place to mention that the revised estimate for 1892–93 reaches Rx. 23,557,900, of which more than Rx. 3,000,000 is for exchange, and the first estimate for the following year falls very little short of that figure.

Provincial Balances.

The subject of Provincial Balances need not be considered in connection with the general finances of the country in more detail than has been already given; but as the arrangements with the local Governments and Administrations have so recently been revised, it is worth while, perhaps, to reproduce for reference from the Financial Statement the figures on which the new agreements are based. The following Table shows the estimates of the amounts that were taken in 1892 as representing fairly the normal Revenue and Expenditure of each Province at the current rate of its expansion. The actual figures vary, necessarily, from year to year, and the only definite sum fixed, accordingly, is the "adjustment," which holds good for the five years of the revised arrangement :—

PROVINCES BROUGHT UNDER THE SCHEME.

| HEAD. | Madras. | Bombay. | Bengal. | North-West Provinces. | Panjab. | Central Provinces. | Assam. | Lower Burma. |
|---|---|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1. Ordinary Revenue (*Share of certain receipts.*) | 2,479,300 | 3,123,900 | 4,249,300 | 3,403,500 | 1,370,400 | 567,600 | 657,700 | 1,427,500 |
| 2. Expenditure | 2,804,700 | 3,895,300 | 4,105,400 | 3,152,900 | 1,718,900 | 788,100 | 545,000 | 1,841,800 |
| 3. Adjustment (*Amount necessary to place in equilibrium the Provincialised Revenue and Expenditure.*) | 325,400 | 771,400 | —143,900 | —250,600 | 348,500 | 220,500 | —112,700 | 414,300 |
| 4. TOTAL REVENUE | 2,804,700 | 3,895,300 | 4,105,400 | 3,152,900 | 1,718,900 | 788,100 | 545,000 | 1,841,800 |

The

The savings held at the disposal of Provincial Governments during the last two years were as shown below :—

| PROVINCE. | 1890–91. | | | 1891–92. | | | | Minimum Balance required to be maintained. | Closing Balance of 1891–92. |
|---|---|---|---|---|---|---|---|---|---|
| | Opening Balance. | Added. | Spent. | Received from 1890–91. | Added. | Spent. | Net Result. | | |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Madras | 1,403,797 | – | 94,821 | 1,308,976 | – | 340,872 | 968,104 | 200,000 | 419,071 |
| Bombay | 906,064 | – | 85,197 | 820,867 | – | 33,629 | 787,238 | 200,000 | 407,011 |
| Bengal | 590,574 | – | 153,877 | 436,697 | – | 34,508 | 402,189 | 200,000 | 235,343 |
| North-West Provinces | 561,046 | 17,750 | – | 578,796 | 21,780 | – | 600,576 | 200,000 | 512,431 |
| Panjab | 449,168 | 34,337 | – | 483,505 | – | 10,510 | 472,995 | 100,000 | 277,068 |
| Central Provinces | 297,429 | – | 32,166 | 265,263 | 25,218 | – | 290,481 | 80,000 | 205,434 |
| Assam | 124,706 | – | 2,547 | 122,159 | 42,527 | – | 164,686 | 50,000 | 135,905 |
| Burma | 278,102 | 117,411 | – | 395,513 | 89,112 | – | 484,625 | 60,000 | 381,217 |
| India (General) | 12,579 | 483 | – | 13,062 | – | 42 | 13,020 | – | – |
| TOTAL | 4,623,465 | 169,981 | 368,608 | 4,424,838 | 178,637 | 419,561 | 4,183,914 | 1,090,000 | 2,573,480 |

The above account does not include the Provincial transactions connected with local deposits and advances, or the balances of what are known as the Incorporated Local Funds, the latter of which amounted, in the aggregate, to Rx. 1,655,964. In a subsequent paragraph an abstract of Provincial resources will be given in which the above will be included, but in connection with the general finances of the country the detail is not required.

One matter, however, of territorial bearing, is here relevant, and this is the result, from our present standpoint, of the acquisition of Upper Burma. This was given in the last Financial Statement, and in the present circumstances is of sufficient interest to justify reproduction in this review.

Upper Burma.

| HEAD. | 1886–87. | 1887–88. | 1888–89. | 1889–90. | 1890–91. | 1891–92. |
|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| A. REVENUE: | | | | | | |
| 1. Land | 167,200 | 378,800 | 436,000 | 539,600 | 616,000 | 582,600 |
| 2. Other Sources | 55,300 | 123,500 | 284,600 | 333,500 | 319,400 | 309,100 |
| 3. State Railways | — | — | 31,900 | 161,400 | 193,300 | 223,600 |
| TOTAL | 222,500 | 502,300 | 752,500 | 1,034,500 | 1,128,700 | 1,115,300 |
| B. EXPENDITURE: | | | | | | |
| 1. Police | 349,000 | 709,200 | 794,900 | 861,700 | 735,800 | 684,600 |
| 2. Other Civil Charges | 165,100 | 265,700 | 436,700 | 393,700 | 435,600 | 467,000 |
| 3. Railways | — | — | 103,300 | 218,700 | 227,500 | 243,300 |
| 4. Civil Works | 171,500 | 343,000 | 295,900 | 296,800 | 292,700 | 330,100 |
| 5. Irrigation | 13,800 | 12,600 | 24,800 | 19,200 | 28,200 | 100,800 |
| 6. Military Works | 74,000 | 314,800 | 160,900 | 142,500 | 141,500 | 152,200 |
| 7. Special Army Services | 1,517,800 | 1,475,300 | 631,600 | 435,800 | 350,300 | 529,200 |
| TOTAL | 2,291,200 | 3,120,600 | 2,448,100 | 2,368,400 | 2,211,600 | 2,507,200 |
| *C. Net Expenditure:* | *2,068,700* | *2,618,300* | *1,695,600* | *1,333,900* | *1,082,900* | *1,391,900* |

Here, it will be seen, making allowance for the partial failure of crops in 1891–92, there is a continuous increase of revenue, accompanied by a parallel expenditure on railways, civil works, and irrigation. The police charges are diminishing, but those on account of the general civil administration show, as in India proper, a tendency to rise, as the standard of material circumstances is raised

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raised under the influence of strong and peaceful government. Military charges are here, again, the most prominent features in most of the annual accounts, if we exclude the police expenses, which partially supersede those of the regular force. Hitherto, however, the deficit has averaged nearly Rx. 1,700,000, though nearly every year indicates a slight improvement, liable, all the same, to obliteration by unforeseen events, such as famine and frontier troubles.

Paper Currency.

Another topic that should be mentioned in connection with the present subject is that of the paper currency of India. This is based on the English principle of having a reserve of coin or bullion equal to the value of all the notes issued, excepting an amount invested in Government securities now fixed at Rx. 8,000,000. For instance, the marginal return shows how the reserve was constituted at various periods within the last two years. The maximum, it may be mentioned, was attained at the end of August 1892, when the addition of bullion and coin floated an issue of Rx. 29,065,000. The fiduciary reserve, again, was only raised to the figure above-mentioned in 1892, under Act XV. of 1890. In 1872-73 it was raised from Rx. 4 millions to Rx. 5¾ millions, and seven years later to about six millions, where it remained until 1891. An interesting point in connection with this branch of finance is the amount of silver bullion in the paper currency reserve. Between 1870 and 1875 it averaged about Rx. 1,468,800. In the next quinquennial period it was Rx. 1,319,000, and then fell to Rx. 793,600. Between 1885 and 1890 it recovered to Rx. 1,096,000, and for the last three years it has varied as shown above. The expansion of the note-system since the year 1871–72 may be appreciated from the marginal statement. In the 22 years in question the circulation has just doubled, but the only notable increase has been in the last three years, and took place, in fact, after the silver operations of 1890-91. The details of the value of the notes issued are also interesting. More than half the total number issued is of the denomination of 10 rupees. The smallest denomination, five rupees, falls far below this proportion, and is less indeed relatively to the total, than those of 100 rupees. Then follow the middle-class notes of 20, 50, and 1,000 rupees respectively. Those of the highest denomination, 10,000 rupees, though actually small in number, have been rising in popularity, and in the year 1890–91 were considerably more numerous than in 1891-92. But except in this case and that of the notes of 50 and 1,000 rupees, the closing year of the decade saw the highest issues

| | 31st March. | | | |
|---|---|---|---|---|
| | 1890. | 1891. | 1892. | 1893. |
| | Rx. | Rx. | Rx. | Rx. |
| Coin - - - | 8,350,298 | 17,902,079 | 14,298,839 | 17,538,574 |
| Silver Bullion - - | 1,421,484 | 788,374 | 1,777,569 | 868,246 |
| Securities - - - | 5,999,998 | 6,999,996 | 8,000,000 | 8,000,000 |
| TOTAL - - - | 15,771,780 | 25,690,449 | 24,076,408 | 26,401,820* |

* Deducting Rx. 5,000 in transit between Calcutta and Bombay.

| Year. | Amount in note circulation on the 31st of March. |
|---|---|
| | *Rx.* |
| 1872 - - | 13,167,900 |
| 1874 - - | 9,249,800 |
| 1876 - - | 10,999,900 |
| 1878 - - | 13,574,700 |
| 1880 - - | 12,357,700 |
| 1882 - - | 13,907,200 |
| 1884 - - | 12,756,500 |
| 1886 - - | 14,173,300 |
| 1888 - - | 16,424,400 |
| 1890 - - | 15,771,800 |
| 1891 - - | 25,690,400 |
| 1892 - - | 24,076,400 |
| 1893 - - | 26,401,800 |

| Denomination of Note. | Proportion to Total Issue. | | | Percentage of Increase or Decrease. | | |
|---|---|---|---|---|---|---|
| | 1882–3. | 1886–7. | 1891–2. | 1882–1886. | 1886–1891. | 1882–1891. |
| Rupees 5 - - - - | 12·53 | 12·17 | 11·09 | + 1·9 | + 16·5 | + 18·7 |
| ,, 10 - - - - | 53·16 | 55·06 | 58·96 | + 8·7 | + 36·9 | + 48·8 |
| ,, 20 - - - - | 8·37 | 7·45 | 6·89 | — *6·6* | + 18·3 | + 10·5 |
| ,, 50 - - - - | 6·34 | 6·05 | 4·83 | + 0·2 | + 2·1 | + 2·3 |
| ,, 100 - - - - | 12·64 | 13·35 | 12·76 | + 10·8 | + 22·1 | + 35·4 |
| ,, 500 - - - - | 2·31 | 2·00 | 1·75 | — *8·9* | + 11·7 | + 1·8 |
| ,, 1,000 - - - - | 4·28 | 3·51 | 3·22 | — *13·8* | + 17·1 | + 0·9 |
| ,, 10,000 - - - - | 0·37 | 0·41 | 0·50 | + 15·7 | + 57·5 | + 82·3 |
| TOTAL - - - | 100·00 | 100·00 | 100·00 | + 4·9 | + 27·8 | + 34·1 |

of the whole period. The statement at the bottom of the preceding page shows the relative proportions of the different denominations, and the increase or decrease of their issues in three different years. The chief features are the rise in the ten, hundred, and ten thousand rupee notes respectively between 1882 and 1892; and the falling off in the issues of those of twenty, five hundred, and a thousand rupees, in the first five years of the decade.

There are now eight circles of issue in India. Those of Cocanada, Nagpur and Akola were abolished in 1882-83, and that of Rangoon was established in 1883-84. The relative importance of each circle can be seen from the average value of its notes in circulation. The following Table shows this for five years of the decade:—

| CIRCLE. | 1882-83. | 1884-85. | 1886-87. | 1889-90. | 1891-92. |
|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. |
| Calcutta | 7,156,419 | 6,574,322 | 5,723,927 | 6,505,343 | 9,717,597 |
| Bombay | 4,590,176 | 4,441,253 | 4,291,025 | 5,215,183 | 8,900,413 |
| Madras | 1,347,286 | 1,334,867 | 1,604,924 | 1,967,443 | 2,767,024 |
| Allahabad | 841,581 | 759,905 | 778,141 | 792,606 | 1,225,672 |
| Lahore | 784,518 | 789,923 | 830,992 | 851,352 | 1,341,744 |
| Karachi | 323,777 | 308,957 | 499,955 | 412,516 | 676,075 |
| Rangoon | — | 205,574 | 339,317 | 272,374 | 580,182 |
| Calicut | 136,954 | 125,926 | 132,814 | 134,679 | 227,530 |
| TOTAL | 15,180,711 | 14,540,727 | 14,201,095 | 16,151,496 | 25,436,237 |

The expansion of the last two years is here seen to have pervaded all the eight circles, Bombay, Calicut, Karachi and Rangoon, perhaps, to a greater extent than the rest. The Calcutta and Bombay circles, which bore in 1882–83 a proportion of 77 per cent. to the total issue, have receded to 72 per cent. in the 10 years, the relative decrease being greater in the case of Calcutta than in that of the western centre. Madras, Bombay and the smaller circles show proportionally a more notable increase than Calcutta or Allahabad.

Taxation and the other Sources of Revenue.

There remain two topics connected with the revenue and expenditure to be noticed. First, the proportion of the former received through taxation and from other sources respectively; and, finally, the provincial distribution of the general heads of account. In respect to the former, the proportional figures in the table below are relevant and explanatory. The per-centage of variation in the

| HEAD. | Incidence per Head of Population. | | | | Per-centage of Variation of Net Revenue in 1891-92. |
|---|---|---|---|---|---|
| | Gross Receipt. | | Net Revenue. | | |
| | 1881-82. | 1891-92. | 1881-82. | 1891-92. | |
| A. TAXATION: | Rs. | Rs. | Rs. | Rs. | |
| 1. Salt | 0·376 | 0·396 | 0·349 | 0·373 | + 18·9 |
| 2. Stamps | 0·172 | 0·195 | 0·164 | 0·187 | + 26·4 |
| 3. Excise | 0·175 | 0·234 | 0·169 | 0·224 | + 47·9 |
| 4. Provincial Rates | 0·148 | 0·160 | 0·144 | 0·158 | + 21·6 |
| 5. Customs | 0·120 | 0·078 | 0·107 | 0·069 | — 27·5 |
| 6. Assessed Taxes | 0·027 | 0·076 | 0·025 | 0·074 | + 22·5 |
| 7. Registration | 0·015 | 0·018 | 0·005 | 0·009 | + 84·0 |
| TOTAL, A. | 1·033 | 1·157 | 0·963 | 1·094 | +26·3 |
| B. OTHER SOURCES of REVENUE: | | | | | |
| 1. Land | 1·119 | 1·098 | 0·963 | 0·919 | + 6·2 |
| 2. Forests | 0·045 | 0·068 | 0·016 | 0·029 | + 104·1 |
| 3. Opium | 0·502 | 0·367 | 0·398 | 0·282 | — 21·2 |
| 4. Tributes | 0·036 | 0·036 | 0·036 | 0·036 | + 9·8 |
| TOTAL, B. | 1·702 | 1·569 | 1·413 | 1·266 | —0·3 |
| TOTAL REVENUE | 2·735 | 2·726 | 2·376 | 2·360 | + 10·0 |
| *Deduct Assignments, &c.* | - - - | - - - | *0·061* | *0·070* | *+ 28·3* |
| NET RESULTS | - - - | - - - | 2·315 | 2·290 | + 10·0 |

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net revenue is reproduced to save reference to a former section. The gross revenue, however, is given in order to show the relation between the population and the amount actually levied from it. But in respect to this incidence, it is necessary to make allowance for opium and tributes, the revenue from which is not contributed by the population of British India, who alone are taken into consideration in the calculation. By omitting these items, the gross incidence falls to Rs. 2·197 in 1881-82, and to Rs. 2·324 only 10 years later. In the net revenue the difference comes to about a tenth of a rupee between the two years. Assuming the rupee to be equal to 15*d.* in both cases, as its exchange variations are immaterial to the present purpose, the incidence would be equivalent to 2*s.* 9*d.* and 2*s.* 10¾*d.* in the two years respectively. Looking at the very simple life of the masses in India, and assuming, as is true in the case of more than nine-tenths of them, that a man is not resident within the scope of municipal taxation, the above table will indicate what will be the burden of taxation on a landless labourer, who neither drinks spirits nor enters upon litigation. *Ex hypothesi*, he pays no income tax, and has no property to register, nor occasion to avail himself of forest produce. Having no land, he contributes nothing towards Provincial Rates, so the State treasury benefits by his existence to the amount he spends on salt during the year, and this is the case with thousands in every Province. No doubt, therefore, apart from other disturbing influences, of which something will appear when the Income Tax and Land assessment are under consideration, the incidence shown in the table cannot be held to be much more than a convenient arithmetical expression, and that on the comparatively few actual taxpayers is probably considerably higher.

The topic of the amount of revenue received and of expenditure debitable in each Province needs no lengthy comment, as the following Table for the most part explains itself. It is not practicable to show the incidence of taxation and other revenue territorially, owing to the large sums brought to account immediately under the Government of India which relate in reality to local transactions. The distribution of the amounts, however, under the three heads of resources, Imperial, Provincial, and Local, has been maintained :—

ACCOUNTS by Provinces, 1891–92.

| PROVINCE, &c. | REVENUE. | | | | EXPENDITURE. | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Revenue. | *Imperial.* | *Provincial.* | *Local.* | Total Expenditure. | *Imperial.* | *Provincial.* | *Local.* |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Madras | 11,368,003 | 7,453,416 | 2,876,961 | 1,037,626 | 9,391,621 | 5,477,034 | 2,854,439 | 1,060,148 |
| Bombay | 13,197,611 | 8,702,618 | 4,045,123 | 449,870 | 8,764,194 | 4,269,201 | 3,983,751 | 511,242 |
| Bengal | 19,838,779 | 13,536,665 | 5,780,199 | 521,915 | 8,975,445 | 2,673,331 | 5,692,315 | 609,799 |
| North West Provinces and Oudh | 11,042,660 | 6,862,931 | 3,356,441 | 823,288 | 5,154,384 | 974,655 | 3,093,133 | 1,086,596 |
| Panjab | 7,871,588 | 5,715,276 | 1,750,018 | 406,294 | 4,833,685 | 2,677,373 | 1,793,411 | 362,901 |
| Central Provinces | 2,350,356 | 1,420,162 | 818,779 | 111,415 | 1,460,481 | 530,287 | 811,941 | 118,253 |
| Assam | 1,039,358 | 383,305 | 578,898 | 77,155 | 749,498 | 93,445 | 559,915 | 96,138 |
| Burma | 5,084,872 | 3,265,029 | 1,664,911 | 154,932 | 3,914,774 | 2,094,931 | 1,662,420 | 157,423 |
| *India, General* | 16,980,133 | 16,966,785 | — | 13,348 | 22,519,754 | 22,506,406 | — | 13,348 |
| TOTAL, in INDIA | 88,773,360 | 64,306,187 | 20,871,330 | 3,595,843 | 65,763,836 | 41,296,663 | 20,451,325 | 4,015,848 |
| In England | 257,919 | — | — | — | 15,974,699 | — | — | — |
| Exchange | 112,004 | — | — | — | 6,937,213 | — | — | — |
| GRAND TOTAL | *89,143,283* | 64,306,187 | 20,871,330 | 3,595,843 | *88,675,748* | 41,296,663 | 20,451,325 | 4,015,848 |

The expenditure included in the above Table is confined to that charged against revenue, with the adjustment of Provincial balances of which mention has been made above. The receipts and charges in England and the exchange on transactions with that country have been added merely to bring the total into accord with that shown for the same year in the early part of this chapter. It will be noted how the distribution between the three main heads varies in the different Provinces on both the Revenue and the other side of the account, but it is not within the scope of this review to enter into the details necessary to elucidate this point.

Leaving

Leaving now the Revenue Account, we have to conclude this chapter with a few lines on the receipts and charges other than on that account. The nature of numerically the greater portion of the details in this section of the Financial Statement has been already described in the preliminary sketch given above, and it is superfluous to enter further into the transactions falling under the head of Deposits and Advances, Local Loans, Remittances, or the Secretary of State's Bills. As regards the cash balances, and other questions of ways and means, all that need be said is that owing to the large surplus of 1889-90 and 1890-91, the provision made for reducing the debt since the beginning of the former year, the increased transactions of Savings banks and the receipt of capital from the railway companies, of which only a portion is required for outlay during the year, it has been found unnecessary to borrow in India for the last three years, though a sterling 3 per cent. loan was negotiated in 1891–92 in London, to meet railway and similar charges. There remains the question of debt and capital expenditure on railway and irrigation works. Under the latter comes an item of Rx. 3,500,000 capital expenditure in 1891–92, of which Rx. 2,770,336 are set down to State railway construction and Rx. 729,664 to irrigation works. This is exclusive of the "general" debt account, and will be mentioned again in connection with public works in the chapter reserved for the latter subject. So far as the present topic is concerned, it need only be stated that on the 1st of April 1881, there were 9,134 miles of line open for traffic, and on the 31st of March 1892, 16,018, with about 400 miles approaching completion. Up to the former date the capital outlay amounted to Rx. 67,201,000, and 66,348,000*l.*, whilst on the 31st of March 1892 it was returned at Rx. 135,398,000 and 67,847,000*l.* On "major" irrigation works the outlay up to the latter date was Rx. 28,321,000.

The general debt account for 1891–92 stood as shown marginally. At the end of the year 1881–82 the corresponding figures were Rx. 88,768,597 and 68,026,512*l.* In connection with the silver or rupee debt, it may be mentioned, in passing, that the proportion held by natives of India has risen from 21·7 per cent. in 1883, when it was below the actual amount held in England, to 29·5 per cent. in 1892. In the interval it averaged about 28 per cent., and stood at nearly 30 at the date of the latest return available. The objects to which the various loans were devoted are shown in the marginal Table below. It has been explained above that all loans are set down to ordinary debt until utilised for capital outlay on public works, and that the amount spent on such works, not only from borrowed money but also from Revenue Savings Banks' deposits or other sources, is transferred to the Public Works portion of the Debt, so that the former section of the debt is continually being reduced, and by these means, aided by the conversion of the 4½ per cent. Rupee loans, the interest upon it has diminished in the ten years to the amount of about Rx. 1,227,000. That on debt in England, on the contrary, has risen by Rx. 759,000, of which 127,000*l.* only was in the sterling payment, and Rx. 632,000 in exchange. In the last year dealt with (1891–92) the debt discharged in India consisted chiefly of a portion of a 4 per cent. Transfer Loan of 1865, with a smaller amount not bearing interest. In England, Indian 3 per cent. Stock amounting to 4,600,000*l.* was created for (a) advances to companies, to the amount of 1,842,547*l.*; (b) discharge of railway debentures, 1,117,100*l.*, and (c) discharge of India 3½ per cent. India debentures, 1,386,000*l.*

| Head. | In India. | In England. |
|---|---|---|
| | Rx. | £ |
| On 1st April, 1891 - | 102,746,662 | 104,408,208 |
| Incurred - - | 7 | 4,600,000 |
| Transferred - | 5,288,363 | 1,614,000 |
| *Total receipts* - - - | *108,035,032* | *110,622,208* |
| Discharged - | 54,352 | 1,604,065 |
| Transferred - | 5,288,363 | 1,614,000 |
| On 31st March, 1892 | 102,692,117 | 107,404,143 |

| Purpose. | Amount on 31st March | |
|---|---|---|
| | 1890. | 1891. |
| | Rx. | Rx. |
| Railways - - - | 102,230,925 | 105,772,856 |
| Irrigation - - - | 27,487,656 | 28,320,704 |
| Other purposes - - | 77,436,182 | 76,002,900 |
| Total - - - | 207,154,763 | 210,096,460 |

FINANCE. 1,386,000*l.* The permanent debt discharged amounted to Rx. 54,352 and 1,604,065*l.*, or, together, to Rx. 1,658,417, of which Rx. 96,703 was through the operation of Sinking Funds. It has been seen from tables previously given in this chapter, that the charge on account of interest has shown a downward tendency. Some advantage may no doubt be derived, in the case of loans in England from the better credit of the Government and the lower rate at which loans are now obtainable; but against this advantage must be set the burden of exchange, which has a tendency, on the whole, to outgrow the remunerative progress of the undertakings for which the obligation was incurred. By an Act passed in 1888, the Secretary of State can borrow up to 10,000,000*l.* for the construction, extension or equipment of railways through the agency of companies and for the discharge of debentures issued by such companies. Under this provision 7,123,978*l.* had been borrowed up to the end of March, 1892. The debt thus raised does not increase the sterling liabilities, for it only takes the place of monies which must have been raised at a higher rate of interest by the companies, under the guarantee of the Secretary of State. The subject of special loans in India to municipalities and other corporations, and to native states and estate-holders, &c., was treated in sufficient detail in the fourth chapter above.

## CHAPTER XI.

### The Principal Sources of Revenue.

Principal Sources of Revenue.

From the general sketch of the finances of India given in the preceding chapter, it will have been seen that the portion of the revenue of the country which is not practically a set off against expenditure is derived from nine or ten sources. First comes the revenue from Land, in its various forms; secondly, we have Opium, followed closely by Salt and Excise, Stamps, Customs Duty, and Assessed Taxes. There remain the Provincial Rates, which are generally levied on land and for specific objects. Those for public works and schools, &c., have been considered, for the most part, in the fourth chapter of this review; whilst the cess for providing village accountants, &c., in the North-West Provinces, which is the only other cess of importance, has been sufficiently treated of in connection with finance. Two departments, those concerned with Forests and Registration, come into a category different from the rest, as neither purport to be mere sources of revenue. The latter has already been reviewed in a separate chapter, and the former will be similarly treated later on, in connection with the administration of the actual resources of the country. Tribute, which closes the list, concerns the States which are subject to it, and not the taxpayer of the British Provinces, so that nothing more need be said of it than has been set forth in the second chapter.

In the present chapter, then, it is proposed to deal serially with the following topics, not only in their fiscal aspect, but with regard also to their administration: Land, Opium, Excise, Customs, Stamps, Salt, and Assessed Taxes.

### A. Land Revenue and Administration.

Land Revenue and Administration.

The importance of this subject is not to be judged so much from a financial as from the social or political standpoint. It is true that it is still by far the largest item of revenue, though, as the marginal note will show, its relative position is gradually being affected by the growth of other resources, in spite of its actual expansion. But we must look rather to the number of people interested in it than to its results to the public Treasury. India is not only a pre-eminently agricultural country, but one of peasant occupants, not of large proprietors. The census of 1891 shows that in addition to the 60 per cent. of the population that looks directly and solely to the soil for the means of subsistence, there are few of the larger classes of occupations in which the possession of land is not returned to a greater or less extent as a subsidiary source of income. The return of these quasi-agriculturists is admittedly incomplete, owing partly to the neglect of the householder; partly, it was found, to that of the census agency, which disregarded the additional detail in favour of the main means of livelihood. But in all Provinces where the so-called village system prevails the artisans and menials that are required to minister to the simple wants of a rustic community are remunerated by the grant of a plot of the village land, which they either till or let out to tenants. Then, again, even where land is not thus provided for these classes, they, as well as the bulk of field and other rural labourers, are paid in kind, either by a proportion of the harvest, or by a fixed amount of agricultural produce. Finally, judging from the large proportion of those returned as general labourers which was found, not in the towns, where their aid is in comparatively keen demand, but in the villages, it may be reasonably assumed that most of the latter are in reality agriculturists who have not obtained a plot of land, either as tenants or occupants; or who have, again, outgrown in number the capacity of the field assigned in recompense of their communal services, and have thus been obliged to take to labouring on the land of others, either for life, or until they have earned enough to set them up as independent cultivators. If all these would-be and semi-agriculturists

| Year. | Land Revenue (Gross). | Percentage on Total Gross Revenue. |
|---|---|---|
| | Rx. | |
| 1842–43 - | 13,560,000 | 60·0 |
| 1852–53 - | 16,190,000 | 56·6 |
| 1862–63 - | 19,570,000 | 43·4 |
| 1872–73 - | 21,370,000 | 37·7 |
| 1882–83 - | 21,870,000 | 31·0 |
| 1892–93* - | 25,580,000 | 28·4 |

* Revised estimates.

LAND REVENUE AND ADMINISTRATION.

turists be taken into the calculation, not much less than four-fifths of the population will be found to look to the land for their livelihood. In the British Provinces, allowing five persons to each family, about 24 millions of households have an interest in the land they live on, and about 8 millions more live on the wages of field-labour. This is altogether exclusive of the large number of land-holding artisans, traders, and professionals, to whom agriculture or the possession of land is no more than a supplementary means of subsistence. So far, then, as to the social and industrial place held in India by ownership or cultivation of the soil. Politically, its widespread prevalence is of no less importance, since in every Province of India proper the organisation and distribution of the local administration is chiefly determined by the system on which are based the relations of the State to the land. Throughout the greater part of India the only outward or visible personality which is held by the masses to be of any account as a link between the village and the power nebulously known as the Government, is that of the man who inquires into the rates of assessment, and into the character of the harvest, stands as a mediator between tenant and landlord, hears village disputes, and, in fine, supervises all the detail of their daily life beyond the domestic circle. If he collects the revenue with one hand, he is known to be able to recommend with the other, remissions in cases of hardship, and a good listener in this position soon becomes the trusted recipient of all local grievances, as being the possible mouthpiece of an illiterate community before the powers that be. It is through him, accordingly, that all information is obtained in regard to the opinions and requirements of the 95 out of every 100 who either live away from town or are otherwise not yet able to communicate their views direct to the arbiters, administratively speaking, of their destiny. In the parts of India where the land revenue system does not place the district officer in immediate relations with the cultivating classes, and where the land is largely held by non-agricultural proprietors, the link has no doubt a tendency to become weaker, and the influence of the State is only regarded as a factor to be thrown into the scale, when necessary, against that of the local magnate or his agent. But everywhere, the protection of the respective rights of those interested in the land, and the due partition, on well established and equitable rules, of the produce thereof between the State and the proprietor, tenant, occupant or cultivator, as the case may be, are matters that, together with the administration of justice, occupy the lion's share of the attention of the local government.

Variety of land revenue systems.

In no two Provinces, however, is the administration of the land conducted on a precisely uniform system. In some cases the British Government built on the foundations of predecessors to a greater extent than in others, and in all, the great variety of soil and climate, of caste, tenure and custom, and of political and geographical situation, that is found in India, has had to be taken into consideration when rules of general and local application were being framed. In the last decennial number of this review the various systems of administration of the land were described at some length, and a valuable summary of the main features by the late Mr. Pedder, C.S.I., was incorporated in the chapter relating to the present subject. Since then, works of reference have been published, dealing in detail with both the administrative and the legal aspects of the different tenures and methods of assessment now prevailing in India. It is superfluous, accordingly, to treat of the subject more than in outline. To do otherwise, in fact, considering the vast amount of technical detail that has to be manipulated in connection with each of the chief Provinces, and the changes that have been effected during the past ten years, would necessitate the extension of this chapter in a degree disproportionate to the rest of the work and to the general purpose of the latter. Some general description is, however, necessary, in explanation of the figures that appear in the revenue or financial accounts of each Province.

General outlines of the systems.

The land appears to have been from time immemorial the mainstay of the State fiscal system in India, and under every ruler the cultivator was bound to contribute a share of the annual produce of his field to the State treasury. Under the Moghal régime this due was converted into a cash payment, assessed on the value of each field as ascertained by special survey, and revised every 10 years or so. Where, however, the Moghal hold on the country was weak, or the colonisation incomplete, as in Bengal and Southern India, the above system was not put into force, and in the former tract the collection of the State due was farmed

farmed to contractors; in the latter, the old system of produce-sharing held its ground. But everywhere the State claim to agricultural tribute was undisputed, in whatever manner it might have been exercised, and the principle subsists to the present time. The British succeeded to the rights of their predecessors in respect to this revenue, and found in most cases the whole system disorganised by the Maratha encroachments on the one side, and the lax discipline of the Moghal provincial authorities on the other. It is not proposed to enter into the earlier tentative measures adopted with a view to putting this branch of the administration on a better footing, except by cursory reference to that which has held its ground against subsequent experience. LAND REVENUE AND ADMINISTRATION.

The first experience of the British, that is to say, in the administration of the land revenue, was in Bengal, where they found two distinct classes vested with interests and responsibilities with regard to it. Acting on the general principle that has since been maintained, of coming to terms with the highest existing interests, the settlement, as it is called, of the revenue was made with the superior holder, either a descendant or representative of the local chief or military man of rank, or a middleman or farmer of the revenue under the Moghal Provincial Governor, but in any case, not the actual cultivator, who held land as tenant or rent-payer. The settlement thus made was permanent; that is, the assessment was fixed once for all. The next tract that had to be dealt with was a portion of the Madras Presidency, in the north-east of which the example of Bengal was followed, and a permanent assessment made. It was the same with a few of the south-eastern tracts of what is still called the North-West Province. Throughout the rest of India, with the exception of a few specially treated grants of land based on individual considerations, the principle of assessment has been that the public should share in the improvement in agricultural circumstances that has resulted from the expenditure of public revenues, whether on general administration or on special enterprise. The settlement is, therefore, subject to revision periodically. In most cases the interval between the revisions is 30 years, representing roughly a generation, in India, but in special cases, where the development of the tract is of recent and rapid growth, a shorter period is fixed. Then, again, the settlement is effected with different classes of interests from those above mentioned in connection with the permanently settled tracts of Bengal and Madras. In Upper India, that is, the North-West Provinces, Oudh, and the Panjab, the village community had preserved a cohesion in its agricultural system which it was found necessary and convenient to recognise to a varying extent. In the Panjab, for instance, the village-community, owing to political circumstances, had managed, in the great majority of cases, to retain a joint hold on its land, so that the assessment on a village having been ascertained, the co-sharers were called into consultation as to the distribution over the individual holdings. In the North-West Provinces, the village was of less uniform constitution. In many cases there were undoubted rights above that of the village community, so that a subordinate proprietary right was all that was recognised to belong to the latter. In others, the tie that kept the village together was but a slight one, whilst elsewhere, again, as in Oudh, the village had been merged, in the continuous process of farming, in a larger revenue unit, known as the Taluka, on which, ultimately, the settlement had to be based, due safeguard being provided for such subordinate rights as were proved to have resisted disintegration. The last mode of settlement which it is necessary to mention here is that in which the State deals direct with a peasant proprietor, who holds, as a rule, a heritable and transferable interest in the land, so long as he pays the assessment fixed on it for the period of the agreement. This prevails throughout the greater part of Madras, Bombay, Berar, Lower Burma, and, to a certain extent, the Assam Valley. Each of the above systems, the *zamindári*, or settlement with proprietors and middlemen, the *mauzewári*, or settlement by villages, and the *raiatwári*, or settlement with the individual occupant, has been found to have its special advantages in the tract where it was originally adopted by an administration strong enough to supervise its working, and to fail where it is planted as an exotic. In the case of the two last-named systems this result was only to be expected, as they were found by the British to be well rooted in the social life of the people. There is less to be said for the first-named, though the time for discussing it, may be said to have gone by.

LAND REVENUE AND ADMINISTRATION.

Such being the general systems on which the responsibility for the payment of the State due is fixed, the next point for consideration is the method of assessing the amount of that charge. This is known by the term "Settlement," and in all but the tracts where the revenue was fixed once for all is preceded by a survey of the whole of the land to be dealt with. This

Revenue survey.

survey is of a most detailed character, and includes the demarcation of each estate, holding field, or other conventional unit, by the prescribed boundary marks; the entry in the record of every well and building, and the plotting of the above detail upon a separate map for each village. Where trained agency of the Survey of India is not used from the beginning of the operations, the work is throughout tested and supervised by that department until the cadastral, or field, survey of the tract is complete. The results are then brought into harmony with those of the Topographical Survey, which, in turn, is based on the great Trigonometrical operations, to be mentioned in a later chapter. In Madras and Bombay there is a special Survey Department which undertakes the detailed work, the connection with the general Survey of India being the same as in the case of Upper India. The internal boundary marks, too, are of more importance under the individual settlement system than when the village is the unit of settlement, so the maps of the village in the former case are more elaborate. In most of Bengal the survey operations are different in scope from those in Provinces where the assessment is periodically revised, and, except in tracts not under the permanent settlement, are chiefly concerned with estates under the temporary management of the State, or which have lapsed, or which, again, are under periodical settlements. There is also a considerable amount of work found every year in the survey of the tracts affected by the great changes that are annually liable to occur in the courses of the numerous estuaries, leading to questions of alluvion, diluvion, and the formation of new islands, which affect miles of country, and to which is attributed much of the rioting and allied offences in Eastern Bengal. The permanently settled tract, here and in Madras, has not yet been surveyed in the same detail as the land in other Provinces, owing partly to the expense of such an undertaking without the chance of compensating return in the shape of extended cultivation. The cadastral survey of Bihar, undertaken as a complementary process to the record under the Bengal Tenancy Act, was begun after the close of the period now under review, and need not, therefore, be discussed here. It must be mentioned, finally, in connection with the operations in periodically revised tracts, that the areas brought under survey at one time vary very considerably. It may be that of 20 villages or of several hundred, but, as a rule, the attempt is made to conduct simultaneously the survey of some definite territorial area, such as a subdivision of a district. This is the case in Madras, where the largest areas are dealt with. The smallest are found in certain cases in the Western Presidency; and in the North-West Provinces the area selected generally comes between the two.

Classification of soil and grouping of villages.

The next step in the process is the classification of the villages under settlement into groups, or assessment circles, according to similarity in their general conditions, such as distinctions of soil, altitude, rainfall, fluvial action, and so on, sometimes with internal re-grouping with reference to communications, water supply, or proximity to markets. The process is carried a stage further in each village, since the soil has to be classified, either by homogeneous blocks, as in parts of Upper India, or field by field, as in Madras and Bombay. With this part of the operations we can here deal superficially only, as the difference in practice is considerable, according to the Provincial system, but, speaking generally, natural qualities are distinguished from artificial such as those resulting from manure, or rather from the facilities for receiving that fertilising agent. Even where this is not done explicitly the distinction is often marked by the nomenclature adopted in recording the description of the soil under inspection. Irrigated lands are distinguished from the rest, and in Bombay a special provision was introduced during the decade in question relating to subsoil water-bearing qualities, irrespective of actual use of the advantage.

Assessment.

We then reach the process of actual assessment. The whole of the information relative to the villages comprised in the assessment circle is compiled and analysed by the Settlement Officer. The past fiscal history of the tract is reviewed in relation to the extension of cultivation, variations in prices, and rents, in the stock of plough and milch cattle, improvement of communications

and

and various other general considerations, on which the revenue or rent-rate, as the case may be, is based. In connection with this most important duty, rules were passed between 1883 and 1885 by the Government of India, after consultation with the local authorities in each Province, setting forth the general principles on which future enhancements of assessment should alone be made. To some extent the provisions only confirmed existing practice, but the main point was the substitution of general considerations, ascertainable from the current revenue records, for the expense, delay, and general inconvenience to both State and public of fresh valuation of produce, rental or soil, at the expiration of each term of settlement. The three grounds on which enhancement is now generally speaking permissible are (a) Increase of the area under cultivation; (b) Rise in prices of agricultural produce, and (c) Increase in produce due directly or indirectly to improvements effected at the expense of the State, or from public resources. Improvements effected by the cultivators or landed classes themselves, whether from their own funds or by means of personal State loans, and whether arising from improved methods of tillage or otherwise, had always been held exempt from assessment in most, though not all, parts of India, but the rules in question extended the exemption throughout the country. The most important question that arose in connection with the above rules was that of the initial assessment which was to be taken as the basis of future revision. Where the earlier operations proved accurate, and experience showed the settlement to have been successful from the point of view of both parties concerned, the State and the cultivator or proprietor, it was obviously superfluous to conduct afresh similar investigations. But in some cases the former record was known to be inadequate as to both survey measurements and valuation, so that here the revision necessarily included that of the preliminary operations. When once the initial assessment is settled satisfactorily, the main duty that devolves upon the local officials under the current scheme is that of keeping the village record up to date, so that re-settlement, when it falls due, may be made from it, irrespective of fresh detailed investigation. This involves the annual correction of the village map under all systems, such as those of Upper India, in which the whole of the unoccupied land in a village is not surveyed, demarcated, and assessed at the time of settlement. In the Madras and Bombay settlements the map is written up once for all. Then there is the record of occupancy to be similarly kept up, according to the requirements of the Provincial system. In Upper India more detail is entered as regards the land in occupation than under the system of individual settlements, where the State looks no further than the registered occupant, and disregards, as a rule, subordinate rights. Assuming that the local duties are efficiently fulfilled, it has been estimated that a saving of over two-thirds the expenditure on re-settlement will ultimately be effected by the adoption of the above system. It is worth while, however, to touch briefly upon the method of arriving at the initial assessment, which varies greatly in the different Provinces. The preliminary processes have furnished the Settlement Officer, as above remarked, with full information as to the relative productive value, by soil groups, of each village in Upper India, and of each field in the Southern and Western Presidencies, in addition to the more general statistics as to the material circumstances of the population of the tract to be dealt with.

LAND REVENUE AND ADMINISTRATION

In the case of the North-West Provinces and Oudh, as most of the land is held by tenants paying rent to the proprietor of the village, the object aimed at is to ascertain the gross rental, of which one-half is held to be the share of the State. The average rent-rate per acre of each class of land in the village is found from the returns of rents actually paid, and these averages are then applied to the area of each class of soil within the village limits. In Oudh the data of other villages besides the one under assessment are taken less into consideration, and the rental value is determined by the custom of the individual village in regard to rent-rates. In the Central Provinces the records of rent were found to be inadequate for the purpose of settlement, so they were only used as an aid, not as a basis, in assessing the village. The rest of the work was done by means of assuming "a fair revenue demand" for the whole tract under assessment, and distributing it over the villages included, until, by repeated corrections, it got fairly adjusted to the circumstances of each. The Panjab system, again, differs from that of the neighbouring Province. The land is here in the hands of cultivating, not merely rent-receiving, proprietors, and

North-West Provinces and Oudh.

Central Provinces.

Panjab.

LAND REVENUE AND ADMINISTRATION.

rent, as in parts of the Central Provinces, is largely in kind, and not regulated, as in the North-West, &c., by competition. Revenue rates have, therefore, to be used instead of rent-rates. The Settlement Officer ascertains, to put it briefly, the average yield of each crop in different soils, irrigated and unirrigated, in each assessment circle, for as long a period as possible, so as to eliminate the effect of vicissitudes of seasons. The State share is taken, as a rule, at one-sixth of the gross produce. The soil classification is a broad one, based on substantial natural or artificial diversities, locally known and recognised by the agricultural classes of the locality, and it is by these generally that the revenue-rates are distributed. A circle estimate is previously framed, with which the produce-estimate is compared, and the results of the distribution of the revenue-rates are ascertained for selected villages, so as to show what revenue for the whole circle would be obtained from the application of those rates. The next process is to fix from the circle assessment the amount due from each estate or village, whilst the distribution thereof amongst the cultivators or co-sharers is generally left as much as possible to the villagers themselves.

Madras.

In the case of the tracts in Madras that are subject to re-settlement, and which constitute about four-fifths of the whole, the basis of the revenue-rate is a series of experiments for determining the average yield of certain staple crops on each class or grade of land. This is converted into cash at the average harvest prices for the 20 years preceding the settlement, and from it are deducted the expenses of cultivation, estimated on certain items of general experience. Allowing a certain proportion for casual losses and for the difference between the rate at which the dealer buys from the producer and that at which he sells in open market, half the balance, that is, half the net produce, is considered to be the State share. But, in practice, a rough estimate is made as to the capability of the tract in question to bear enhancement and to what extent, as in the case of the Panjab and Central Provinces, and the results of the elaborate investigations above mentioned are adjusted to suit this estimate. The field assessment is based on classification of soil, graduated in accordance with the grouping of the villages, as in other Provinces.

Bombay.

The assessment in the Bombay Presidency is by fields, or survey numbers, as they are termed, just as in Madras, but the revenue-rate is ascertained by different means. The villages to be settled are carefully grouped in the manner already described above, and the revenue history of the tract since the last settlement fully ascertained in detail. The absolute amount of the new assessment in the aggregate is then determined on general considerations, and distributed over the villages under revision. In the course of the survey an elaborate classification of soils, based on tests in each survey number, has been completed, so that the relative productive value of each is known with reference to the conventional standard, which is 16 for a perfect field, that being the number of annas in a rupee, a method of computation popular throughout the country. A maximum rate for each group of villages is fixed, according to which each number is assessed. Crop experiments, such as those in Madras, are used, but as tests of the general incidence of the rates, not as their basis. The appraisement of the variation in circumstances since the last revision, together with the grouping of villages with reference to their maximum rates, are thus the most important features in this system.

Sindh.

In Sindh, where the cultivation depends chiefly upon irrigation from canals fed by the rising of the Indus, the system of soil classification and village grouping is necessarily very different from that of the rest of the Presidency, and looking to the nature of the country, the term of settlement is shorter than elsewhere, but with the exception of the results of fluvial action, the preliminary operations already completed are expected to stand good at future revisions. In Berar the settlement system is essentially the same as that in the adjacent tracts under the Bombay Government.

Lower Burma.

Lower Burma presents a new set of conditions. The village, as it is understood in India, is not represented by the "Kwin," which is apparently a fortuitous collection of estates, unconnected by the ties that bind the communities of India proper. The settlement operations are simplified, probably, by the fact that rice is practically the only crop extensively cultivated. The assessment represents half the net produce, but the latter term is used in a wider sense than in the Madras Presidency, where it is also the standard of assessment. In the latter only the cost of cultivation is theoretically, at least, deducted from the gross out-turn, whilst in Burma the cost of living is also subtracted,

subtracted, and it is specified in the instructions that the rate should in no case be such as is likely to lead to a lowering of the standard of living amongst the people. The average expenditure of a Burmese family, it may be observed, is represented to be nearly six times that of an Indian, and in practice, the full half is not taken. The settlement in the case of rice-land is for 10 to 15 years, with a liberal allowance, as in Sindh, for fallow. In Assam there is a quasi-individual settlement, though the Province comprises such very different communities and stages of civilisation that but a small portion of it comes under each of the systems of land administration current there. In some parts of the Province annual measurements and assessments are customary, and in more advanced tracts, since 1883, there have been 10 years' settlements. The village, again, goes for little or nothing in the revenue system, and the unit is a larger one, that of the revenue contractor. The assessment is based on a simple classification, which is adapted to the uniformly fertile nature of the valley. Three classes of soils are recognised, and the rates for each are fixed; the annual assessment thus becomes a matter of mere arithmetic. Special rules, differing essentially from those of the Assam Valley, are current in Goalpara, Sylhet, and Kachar, where the system approximates, to a great extent, to that of Bengal. The Hill-tracts, again, are withdrawn from the ordinary system, and in some parts of them a house-tax, in lieu of assessment on the land, is taken. In Upper Burma, again, the capitation tithe, or household tax (Thathameda), takes the place of land revenue, except in the case of State-lands, which form a small fraction only of the total area in occupation. The assessment on the latter is at present based on the recommendations of the local revenue authorities, and no uniformity is, in the circumstances, attempted.

LAND REVENUE AND ADMINISTRATION.

Assam.

Upper Burma.

In connection with the subject of settlement there remains one point to be noticed, namely, that of the record of rights. This consists mainly of the field map and the field register. The former exhibits the position, shape, and number of every field; the latter gives its area and the details connected with it, such as its class and the fact of its being irrigated or not. Further details are added, which differ in each system. Generally speaking, the name of the occupant only is entered in the case of an individual settlement, whilst in Upper India it is found necessary to enter that of the tenant as well. Then, again, the powers of the officer preparing this record differ in the two systems. In Madras and Bombay he will enter the person in occupation, and leave other claimants to substantiate their title in the Civil Court. In the North-West Provinces he will himself take evidence and record a decision. In both cases a decree of a competent Court will be final. Elsewhere in Upper India his decision, duly entered in the register, has the force of a decree, and is therefore unalterable by civil suit. In addition to this register, a list of tenants, with the details of their holdings, is prepared at a settlement by villages or estates, as well as one of the names and shares of the proprietors, and the extent of their joint and several responsibility, either individually or by recognised groups.

Record of Rights.

Enough has been now written regarding the general system of the assessment of land; but there is one point immediately connected with the revenue which it is advisable to mention. This is the method of dealing with lands newly taken into cultivation. In the system current in Madras and Bombay, as each field is assessed at the settlement, whether it be occupied or waste, the assessment thereon is levied as soon as it is taken into occupation. On the other hand, where a village settlement is the rule, the extension of cultivation is profitable to the public treasury from the date of revision only, and in the interval the whole benefit is reaped by the proprietors. It is thus obvious that any extension or retraction of cultivation appears in the accounts of a settlement by individual occupants at the end of the year in which it takes place, whereas, under the joint, or estate, system, the fluctuations shown annually are mainly accidental or connected with estates specially situated with reference to the revenue demand. Again, under the first-mentioned system, the revenue being assessed directly on the field or survey number, the occupant is at liberty to throw up his land in any year he pleases; but where the settlement is on the village, or large estate, the party responsible for the revenue is liable for the amount settled on it, irrespective of changes in agricultural circumstances, until the next revision.

Arable waste.

LAND REVENUE AND ADMINISTRATION.

Collection of land revenue.

The collection of the land revenue, it may be observed, is conducted, as far as possible, in accordance with the convenience of the cultivator, and the instalments are due, accordingly, soon after each harvest has been brought to market. The dates differ more or less in every province, even as the periodic rainfall varies, but there are, as a rule, instalments based on the early, or autumnal, crops, and others on the winter crops. Thus, the land revenue year does not correspond with the financial, which terminates with a date that falls, in most provinces, well between two harvests. The former ends, generally speaking, whilst the agricultural tide is at the ebb, when the field operations of one season are over and those of the next are only just in hand; that is, between July and September. Without entering into the details of the process, which have, nevertheless, features of considerable interest and importance in relation to the attitude of the cultivating classes with respect to what may be termed the individualising tendencies of British administration, a few points may be mentioned in regard to which changes have taken place within the last 10 years. In the first place, acting on a suggestion made by the Famine Commission, the Government of India recommended to all Local Governments and Administrations special attention to the circumstances of small individual tracts and even villages, in fixing the dates of instalments, in order that special circumstances might not be sacrificed to an otherwise convenient uniformity in the district. The inquiries made on this subject showed that, on the whole, the desired object had been attained by the arrangements in force. Then, again, the advisability of the introduction of greater elasticity into the system in force in Upper India was a question prominently brought forward after the occurrence of failure of crops and damage by locusts, floods, and other calamities on different occasions. The Government of India, therefore, took steps to facilitate the suspension of the revenue in seasons of undoubted hardship, and in cases where such a measure was undoubtedly equitable. The question of ultimately converting such relief into actual remission of assessment was also brought forward, but as it is not one which can be decided under hard and fast rules, it was left very largely for decision on the merits of each case as it arose and when the character of the subsequent harvest had been ascertained. So far as Southern and Western India are concerned, the settlement system already recognises to a sufficient extent the principles which it was sought to introduce into other provinces, though the practice as regards this kind of relief to the cultivating classes differs in Madras from that which prevails in the sister presidency.

The tenantry.

The relations between landlord and tenant in the various provinces of Upper and Central India, where the proprietary system of settlements exists, and in Bengal, where these relations had grown complex and unsatisfactory, have been dealt with by legislation of considerable importance during the decade. Most of the enactments have received mention in the chapter on Legislation, and their provisions are so widespread and complicated that it is out of the question to enter into them here. Generally speaking, the main object in all cases was to confirm the position of the tenantry, which, under the action either indirectly of legislation or directly of competition, had been greatly weakened, so that the actual cultivator of the soil was descending gradually to the status of a labourer, for the benefit of a non-agricultural intermediary, a result never contemplated by the State when legislating on the subject at a time when the country was but half developed. The new enactments, wherever they have had time to take effect, have proved well adapted to fulfil their object, and the position of the classes affected by them, so far as legislation can secure it, has been placed on a satisfactory basis. Unfortunately, there are other influences beyond the reach of State action, which show no signs of diminution in their counteracting force, and which tend accordingly to the depression of the peasant in one direction, while he is being raised in another. Agricultural indebtedness, to take a notorious instance, appears to be in more or less direct proportion to security of tenure. The least solvent class, generally speaking, are the large proprietors, and next to them in order follow the occupancy tenants, or those secured in their possession, the peasant proprietors of the peninsular settlements, and the tenants-at-will. Social estimation is largely based on the scale of expenditure on social or domestic ceremonial, which is necessarily non-productive;

| | |
|---|---|
| Central Provinces Acts - - | 1883 and 1889 |
| North-West Provinces Act - | 1886 |
| Oudh Rent - - - - | 1896 |
| Bengal Tenancy - - - | 1885 |
| Panjab Tenancy - - - | 1887 |
| ,, Land Revenue - - | 1887 |
| Madras (Malabar) Revenue - | 1887 |

ductive; and as long as this standard remains, so long does the landholder fail to benefit materially by the improvement of his legal rights.

Before dealing with this branch of the revenue province by province, it is advisable to show the general results for the country as a whole somewhat more fully than was done in the preceding chapter. The financial returns give the five-yearly averages shown in the margin, together with the amounts for the last two years. It must be remembered that during a great part of the period included the earlier settlements were in force, so that revision has only taken effect during the later years. Again, Upper Burma is added to the return since 1886–87, in which year Rx. 167,000 only was received from it under this head, against Rx. 582,600 in 1891–92, and Rx. 616,000 in the preceding year, when there was no considerable failure of crops. But, on the whole, the revenue shows a slow but steady progress, as was noted in the case of the net receipts, which received comment in the last chapter.

| Year. | Gross Land Revenue. |
|---|---|
| | Rx. |
| 1861–65 | 19,931,000 |
| 1866–70 | 19,990,000 |
| 1871–75 | 20,965,000 |
| 1876–80 | 21,114,000 |
| 1881–85 | 22,122,000 |
| 1886–90 | 23,432,000 |
| 1890–91 | 24,754,000 |
| 1891–92 | 24,639,000 |

The same feature was noticed in the Financial Statement for 1888–89, when the figures for the revenue, not the financial, year were given as in the following statement, in which thousands of Rx. are used :—

| PROVINCE. | 1882–83. | 1883–84. | 1884–85. | 1885–86. | 1886–87. |
|---|---|---|---|---|---|
| Madras | 4,721 | 4,779 | 4,492 | 4,807 | 4,864 |
| Bombay | 3,083 | 3,407 | 3,316 | 3,342 | 3,373 |
| Bengal | 3,801 | 3,680 | 3,915 | 3,799 | 3,736 |
| North-West Provinces and Oudh | 5,782 | 5,769 | 5,809 | 5,784 | 5,798 |
| Panjab | 2,075 | 2,058 | 2,153 | 2,157 | 2,146 |
| Central Provinces | 612 | 613 | 613 | 615 | 619 |
| Assam | 396 | 404 | 410 | 420 | 401 |
| Burma, Upper | — | — | — | 39 | 235 |
| „ Lower | 1,099 | 1,166 | 1,133 | 1,137 | 1,222 |
| India (General) | 88 | 96 | 110 | 110 | 116 |
| TOTAL | 21,657 | 21,972 | 21,951 | 22,210 | 22,510 |

It is not to be expected that there should be any "leaps and bounds" in revenue from this source, as even the rates fixed on revision of settlement are not usually imposed over large areas within the limits of a single season; and except in Lower Burma the revenue from extended cultivation only comes in by small increments every year, and a single bad season in the precarious tracts of the Deccan throws back the revenue by thousands of rupees, not only on account of resignation of holdings, but, in the Madras portion of that tract, by reason of heavy remissions under the local system.

The following table, from the Statistical Abstract, shows the provincial receipts for the last 10 years. It should be mentioned, first, that the portion of land revenue which is due to large irrigation works, under the special rules applying to those undertakings, is here deducted, and, secondly, that in Bombay the revenue here shown includes items of which only a portion is actually credited to the State, the balance being assigned to the individual under arrangements handed down from the Maratha or preceding governments :—

LAND REVENUE AND ADMINISTRATION.

IN THOUSANDS OF RX.

| YEAR. | TOTAL. | Madras. | Bombay. | Bengal. | North West Provinces and Oudh. | Panjab. | Central Provinces. | Assam. | Burma. | India (General). |
|---|---|---|---|---|---|---|---|---|---|---|
| 1881-82 | 21,948 | 4,355 | 3,846 | 3,794 | 5,751 | 2,062 | 614 | 379 | 1,052 | 95 |
| 1882-83 | 21,876 | 4,506 | 3,695 | 3,834 | 5,656 | 2,043 | 610 | 385 | 1,058 | 89 |
| 1883-84 | 22,362 | 4,515 | 3,959 | 3,792 | 5,680 | 1,997 | 619 | 395 | 1,308 | 97 |
| 1884-85 | 21,832 | 4,186 | 3,856 | 3,742 | 5,728 | 2,070 | 606 | 405 | 1,141 | 98 |
| 1885-86 | 22,592 | 4,521 | 4,201 | 3,856 | 5,685 | 2,129 | 606 | 423 | 1,058 | 113 |
| 1886-87 | 23,056 | 4,459 | 4,202 | 3,878 | 5,763 | 2,104 | 626 | 431 | *1,481 | 112 |
| 1887-88 | 23,189 | 4,528 | 4,274 | 3,800 | 5,700 | 2,110 | 624 | 430 | 1,597 | 126 |
| 1888-89 | 23,016 | 4,392 | 4,293 | 3,737 | 5,651 | 2,173 | 631 | 444 | 1,556 | 133 |
| 1889-90 | 23,981 | 4,570 | 4,344 | 3,888 | 5,819 | 2,224 | 665 | 446 | 1,899 | 126 |
| 1890-91 | 24,045 | 4,374 | 4,432 | 3,882 | 5,744 | 2,225 | 676 | 453 | 2,109 | 150 |
| 1891-92 | 23,966 | 3,951 | 4,446 | 3,868 | 5,931 | 2,321 | 701 | 467 | 2,142 | 139 |

* Upper Burma revenue first added in 1886-87.

The growth of land revenue indicated in the above statement becomes more clear when the figures are exhibited in their proportional form, that is, with reference to those for the first year of the series. Taking each alternate year, the marginal table gives this ratio. The increase in the gross revenue for all India in the 10 years is almost exactly proportionate to the growth of population; that is to say, for every Rx. 100 in 1881–82 there were collected Rx. 109·3 in 1889–90, and 109·2 in 1891-92. The figures for Burma are exceptional, as in the first year shown in the table greater punctuality in realising the demand resulted in a large increase brought to account within the year. From 1886-88 downwards the Upper Burma receipts began to come in in increasing amounts. Nevertheless, the growth of revenue in the lower division of the province has been very large. Assam is the next province in this respect, with a continuous and steady increase. Bombay, including Sindh, is in much the same position. The rise in the Panjab and Central Provinces has taken place chiefly in the closing years of the decade. Madras suffered rather severely in the revenue from its northern tracts both in 1890–91 and 1891-92. Throughout the rest of the period in question the results here were but slightly above the standard, and far below the growth in population, which was exceptionally rapid between the year of the great famine and that with which the period closes. The North-West Provinces have reaped the benefit of several important revisions of assessment of late years, and this accounts, probably, for much of the increase between 1889 and 1892. With the exception, however, of a few districts in the submontane tract, there is little room for the expansion of the already dense agricultural population, and the census results show that the growth of the latter is at little above one-third the rate of the rest of the larger provinces. In Oudh, on the other hand, the population has largely increased, in spite of its remarkable density and the consequent competition for land. The legislation of recent years, which has set a limit, not to the amount of rent which may be asked by the proprietor, but to that which he is entitled to recover by legal process and to his power of enhancement generally, is likely to have materially improved the position of the smaller tenants, for the time being. Bengal has so large a proportion of its land under permanent settlement that, except in Orissa, Chittagong, and the submontane tract, it cannot be expected to show material variations. There appears to have been a slight retrocession in 1891-92, which, with the more important decrease in Madras, accounts for the general falling off in the total.

| Province. | 1883–84. | 1885–86. | 1887–88. | 1889–90. | 1891–92. |
|---|---|---|---|---|---|
| Madras | 103·7 | 103·8 | 104·0 | 104·9 | 90·7 |
| Bombay | 102·9 | 109·2 | 111·1 | 112·9 | 115·6 |
| Bengal | 99·9 | 101·6 | 100·2 | 102·5 | 101.9 |
| North-West Provinces and Oudh. | 98·8 | 98·8 | 99·1 | 101·2 | 103·1 |
| Panjab | 96·8 | 103·2 | 102·3 | 107·9 | 112·6 |
| Central Provinces | 100·8 | 98·7 | 101·6 | 108·3 | 114·2 |
| Assam | 104·2 | 111·6 | 113·5 | 117·7 | 123·2 |
| Burma | 124·3 | 100·6 | 151·8 | 180·5 | 203·6 |
| TOTAL | 101·9 | 102·9 | 105·6 | 109·3 | 109·2 |

In order to explain the general nature of the receipts and charges coming under the general head the following table is added, giving the figures for 1891–92 by provinces, with the general results for the preceding year.

## Land Revenue General Account, 1891–92.

| Head. | Total. | Madras. | Bombay. | Bengal. | North-West Provinces and Oudh. | Panjab. | Central Provinces. | Assam. | Burma. | | India (General). |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Upper. | Lower. | |
| A.—Receipts: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1. Ordinary Land Revenue | 22,197,985 | 4,312,500 | 3,579,408 | 3,772,643 | 5,996,825 | 2,194,949 | 693,205 | 430,749 | 97,766 | 992,484 | 127,456 |
| 2. Sale of proprietary right of Government in Land | 2,033 | 70 | — | 265 | 1,506 | 33 | — | 24 | — | — | 135 |
| 3. Assessment of alienated Lands, less quit-rent | 928,190 | — | 899,775 | 7,410 | — | 21,005 | — | — | — | — | — |
| 4. Sale of waste Lands and redemption of Land Revenue | 14,465 | 970 | — | 10,409 | 69 | 1,614 | — | 395 | 111 | 34 | 863 |
| 5. Capitation or House Tax in lieu thereof | 378,132 | — | — | 1,889 | — | — | — | — | — | 374,696 | 1,547 |
| 6. Receipts for the improvement of Government Estates | 46,887 | — | — | 46,887 | — | — | — | — | — | — | — |
| 7. Fisheries and other Miscellaneous Receipts | 1,071,271 | 109,093 | 28,040 | 28,454 | 47,067 | 128,966 | 8,302 | 35,732 | 484,684 | 192,261 | 8,672 |
| Total Receipts 1891–92 | 24,638,963 | 4,422,633 | 4,507,223 | 3,867,957 | 6,045,467 | 2,346,567 | 701,507 | 466,900 | 582,561 | 1,559,475 | 138,673 |
| Total Receipts 1890–91 | 24,754,205 | 4,851,279 | 4,506,601 | 3,881,940 | 5,854,725 | 2,271,527 | 676,166 | 452,855 | 615,998 | 1,492,717 | 150,397 |
| B.—Charges: | | | | | | | | | | | |
| 1. District Administration | 2,209,498 | 389,864 | 290,952 | 291,488 | 683,627 | 195,371 | 114,804 | 60,365 | 77,554 | 75,493 | 29,980 |
| 2. Survey and Settlement | 503,843 | 89,871 | 77,816 | 74,459 | 37,222 | 60,593 | 39,514 | 15,137 | 46,362 | 47,340 | 15,529 |
| 3. Land Records and Agriculture | 56,190 | 5,922 | 7,527 | 8,205 | 8,230 | 3,856 | 4,489 | 1,425 | 612 | 13,547 | 2,377 |
| 4. Charges directly connected with the collection of Land Revenue | 1,064,562 | 415,613 | 288,278 | 37,282 | 32,411 | 127,375 | 239 | 17,808 | 42,896 | 101,860 | 800 |
| Total Charges in India | 3,834,093 | 901,270 | 664,573 | 411,434 | 761,490 | 387,195 | 159,046 | 94,735 | 167,424 | 238,240 | 48,686 |
| Charges in England, including Exchange | 1,033 | — | — | — | — | — | — | — | — | — | — |
| Total Charges 1891–92 | 3,835,126 | 901,270 | 664,573 | 411,434 | 761,490 | 387,195 | 159,046 | 94,735 | 167,424 | 238,240 | 48,686 |
| Total Charges 1890–91 | 3,676,596 | 840,528 | 662,241 | 363,096 | 749,470 | 380,418 | 157,582 | 93,153 | 157,463 | 210,425 | 61,760 |

The receipts include the portion of Land Revenue (Rx. 673,189) credited to irrigation in the General Accounts.

LAND REVENUE AND ADMINISTRATION.

On the receipt side the two chief items requiring comment are those of the assessment of alienated land in Bombay and the miscellaneous receipts in Burma. The former is the excess of assessment over and above the quit-rent payable by persons to whom the revenue had been assigned on some consideration or other by the Maratha or preceding Governments, so that it ought not, correctly speaking, to appear under this head at all, as it represents thereby the amount that would have accrued to the State if such assignment had not been made. As it has appeared, however, in the annual accounts for some time past it is here included. As to the second item, the greater portion appertains to the Thâthameda and corresponding tax, or to fishery receipts, &c. The former represents roughly what is due on account of the land cultivated by each household. The charges against land revenue are not uniformly distributed through all the Provinces. For instance, the items here grouped as those directly connected with the collection of the land revenue comprise chiefly the allowances to village officers in Madras, Bombay, and the Panjab, whereas in the North-West Provinces a good deal of this charge is met by the imposition of a special cess, as has been already mentioned in a preceding chapter. The next most important items are found in Burma, where a percentage allowance on collections is debited to land revenue. In certain cases a portion of the latter is credited to irrigation works. As the marginal table shows, this is chiefly done in the Madras Presidency, where considerable sums are thus dealt with in connection with the Godavari and Kistna Delta schemes, and smaller amounts from that on the Kavari River. In the North-West Provinces and Oudh, the Ganges and Jamna Canal account for most of the entries, and in the Panjab the Bari Doab work. The Bombay items are almost entirely those from works in Sindh, such as the Eastern Nára, the Begári, and the Desert Canals.

| Province. | Irrigation Share. | |
|---|---|---|
| | 1891–92. | 1890–91. |
| | Rx. | Rx. |
| Panjab | 25,106 | 46,422 |
| North-West Provinces | 114,581 | 110,697 |
| Madras | 471,875 | 477,606 |
| Bombay | 61,627 | 74,271 |
| TOTAL | 673,189 | 708,996 |

There are several other topics connected with the administration of this branch of the revenue which ought not to be left unnoticed, but the diversity of their treatment in the different Provinces renders it necessary to relegate them to the territorial review with which this section closes. In this general view one important point remains for comment, namely, the incidence of the State assessment on the land and the population respectively. The Government of India publishes Annual Tables in which this information is given, but owing to the variety of tenure it is not easy to appreciate the real bearings of the figures, and no review accompanies these Returns. The marginal Table gives the general results, with the addition of the proportion borne by the assessment and subsidiary receipts from the land, excluding cesses for special purposes. The total for all India, for reasons that may be gathered from what has been said above, is devoid of statistical significance, but to render it more in accord with the Provincial figures the revenue derived from railways and other general undertakings not brought to account locally, has been excluded. Admitting this, the ratio falls to just over 28 per cent. The land revenue is in the highest proportion, it appears, in the North-West Provinces and Oudh; Assam and Burma follow; Bombay and Madras represent very nearly the average for the whole country, and Bengal comes at the bottom of the list. Both here and in Bombay, however, it must be remembered that Customs and Opium revenue is brought to account at local centres

Incidence of the Assessment on Land.

| Province. | 1891–92. | | |
|---|---|---|---|
| | Per Head of Population. | Per Acre of Assessed Land. | Percentage on Total Revenue. |
| | *Rs.* | *Rs.* | *Rs.* |
| Madras | 1·406 | 0·927 | 34·7 |
| Bombay | 1·922 | 1·005 | 33·6 |
| Sindh | 2·021 | 2·375 | |
| North-West Provinces | 1·344 | 1·094 | 53·7 |
| Oudh | 1·125 | 0·990 | |
| Panjab | 1·224 | 0·385 | 29·5 |
| Central Provinces | 0·661 | 0·240 | 29·8 |
| Assam | 0·776 | 0·620 | 44·9 |
| Upper Burma | 1·760 | 3·120 | 42·1 |
| Lower Burma | 2·000 | 1·714 | |
| Coorg | 1·729 | 2·167 | — |
| Ajmer | 0·687 | 0·349 | — |
| TOTAL RETURNED | 1·380 | 0·781 | 33·1* |
| *Bengal*† | 0·531 | 0·474 | 19·5 |

* Excluding the revenue under the head of "India, *General*," owing to the undistributed receipts from Posts, Telegraphs, and Guaranteed and Subsidized Railways, &c.

† The Bengal figures are approximate only.

centres which is ultimately derived from a population far beyond the Provincial frontier, and, so far as Bombay and Madras are concerned, the same may be said of Salt also. The more valuable part of the table is that which refers to the acreage incidence. In nearly every Province the land is assessed in some cases at far below the normal rates, and the general average, in which this distinction is obliterated, is therefore below the actual rate on fully assessed areas. This point will receive comment below, and for purposes of inter-provincial comparison may be generally disregarded, since the want of uniformity is, in some shape or other, fairly general. But the land classed in the Government of India return as "fully assessed," includes all that held on tenures under which the revenue from land not in cultivation at the settlement is foregone until the next revision, and the result is that, in the Provinces where such tenures are the most prevalent, the difference between the incidence on the acreage shown as assessed and on that entered as cultivated, is very wide. The marginal table serves to show this in some degree. The required data are not available in Provinces where proprietary land not furnishing cultivation returns is mixed up with that held on other tenures, as in Madras, Bengal, Assam, and Ajmer. The difference is, relatively speaking, most noteworthy in the Central Provinces, where the rate of assessment is lowest, and least in Bombay, where the settlement is with the individual, who pays for what he occupies year by year. The figures for Sindh are obviously based on misconception of the object of the return. Taking the incidence as it stands, the average charge in India is but 0·781 rupees per acre assessed; that is, if the rupee be taken at its former rate as the equivalent of two shillings, the assessment falls about 1 *s.* 6¾ *d.* The highest rate is in Upper Burma; but it is on cultivation, and is not assessed on the same system as in India Proper. In the latter country, the quasi-alluvial tract of Sindh, and the gardens and rice-fields of Coorg bear the heaviest rates, whilst the State revenue from the land falls lightest in the Central Provinces and Panjab. Of these, the former is a tract which has practically been developed only within the last half century, whilst in the latter the cost of irrigation, whether from private or State works, is not taken into consideration in the above calculation. It would be interesting to trace the course of the incidence during the ten years, but the returns for several of the Provinces are not now compiled on the same system as they were in 1881–82, and even since the Government of India has taken up the question of uniformity it is only during the last two years or so that the results have been considered as trustworthy. The data for comparison are, no doubt, available, but to extricate them from all the extraneous matter with which they were encumbered at the time of compilation is a task which that Government is unable to undertake. It is not found practicable, indeed, as above remarked, to pass in review even the current statistics which reach the Revenue and Agricultural Department every year, so they are simply printed and published. The marginal table above gives figures which appear to be approximately correct for certain Provinces, and which show the general steadiness of the incidence.

| Province. | Incidence on— | | |
|---|---|---|---|
| | Total Assessed. | Area Cultivated. | Difference. |
| | *Rs.* | *Rs.* | *Rs.* |
| Bombay | 1·005 | 1·021 | 0·016 |
| Sindh | 2·375 | 2·354 | 0·021 |
| North-West Provinces | 1·094 | 1·802 | 0·708 |
| Oudh | 0·990 | 1·615 | 0·625 |
| Panjab | 0·385 | 1·000 | 0·615 |
| Central Provinces | 0·240 | 0·401 | 0·161 |
| Coorg | 2·167 | 2·604 | 0·437 |
| Berar | 0·896 | 0·969 | 0·073 |
| Lower Burma | 1·714 | 1·854 | 0·140 |

| Province. | Assessment, and per Acre of— | | | |
|---|---|---|---|---|
| | Total Assessed. | | Cultivated only. | |
| | 1885–6. | 1890–1. | 1885–6. | 1890–1. |
| | *Rs.* | *Rs.* | *Rs.* | *Rs.* |
| 1. Madras (Individual proprietors). | 1·437 | 1·583 | 1·781 | 1·797 |
| 2. Bombay and Sindh | – | 1·240 | 1·047 | 1·240 |
| 3. North-West Provinces | 1·042 | 1·094 | 1·917 | 1·766 |
| 4. Oudh | 0·990 | 0·984 | 1·526 | 1·703 |
| 5. Panjab | 0·443 | 0·380 | 0·984 | 0·974 |
| 6. Central Provinces, Khálsa | 0·161 | 0·187 | 0·391 | 0·411 |
| 7. Lower Burma | 1·391 | 1·672 | 1·453 | 1·822 |
| 8. Assam | 0·373 | 0·609 | – | – |
| TOTAL RETURNED | 0·641 | 0·792 | – | – |

Cultivated area.

The next point bearing upon the general question of the expansion of the State Revenue from land is the variation in the cultivated or occupied area. The following table gives the figures, in thousands of acres, of the area return as cultivated or under current fallow for the last five years. The initial year of the decade is also entered, though the information at that time was not tabulated with the same methodical uniformity as has been obtained since. The equally important

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important factor in this question, that of the cultivable area still unoccupied, is added, though its discussion belongs more correctly to the subject of agriculture.

| Province. | 1881–82. | | 1887–88. | | 1888–89. | | 1889–90. | | 1890–91. | | 1891–92. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Occupied. | Available. | Occupied. | Available. | Occupied. | Available. | Occupied. | Available. | Occupied. | Available. | Occupied. | Available. |
| Madras | 25,000* | 18,124 | 28,267 | 8,376 | 28,254 | 8,461 | 28,770 | 8,021 | 28,878 | 7,869 | 28,824 | 7,965 |
| Bombay | 21,869† | 3,600* | 30,430 | 3,413 | 30,480 | 3,340 | 30,664 | 2,554 | 29,774 | 2,188 | 29,998 | 2,067 |
| Sindh | 3,050† | 5,652† | 3,971 | 3,310 | 5,902 | 5,492 | 6,205 | 4,402 | 6,367 | 5,200 | 6,441 | 5,760 |
| North-West Provinces. | 25,172 | 9,240‡ | 27,528 | 8,095 | 27,650 | 7,930 | 27,650 | 7,901 | 27,679 | 7,934 | 27,384 | 7,980 |
| Oudh | 8,274 | 4,035‡ | 9,318 | 3,363 | 9,339 | 3,374 | 9,365 | 3,343 | 9,387 | 3,313 | 9,413 | 3,283 |
| Panjab | 23,523 | 24,752‡ | 24,683 | 23,465 | 24,893 | 24,859 | 25,492 | 24,311 | 25,871 | 26,934 | 25,779 | 24,472 |
| Central Provinces | 14,141 | 11,811 | 15,529 | 7,526 | 15,437 | 7,295 | 15,507 | 7,189 | 17,160 | 9,076 | 17,786 | 9,427 |
| Assam | 2,167 | 13,324 | 2,349 | 9,339 | 2,595 | 8,704 | 2,610 | 8,717 | 2,676 | 8,922 | 2,559 | 9,012 |
| Lower Burma | 3,639 | 23,720† | 4,654 | 23,373† | 4,876 | 16,842 | 5,333 | 17,412 | 5,714 | 16,803 | 5,665 | 18,527 |

* Approximate only.

These figures indicate the generally uniform but slow progress made in breaking up fresh land, with the rapid growth of the cultivated area in Burma and the Central Provinces. In the North-West Provinces and Oudh the stationary condition seems to have been almost attained, which is probably true; and, according to the return, it is the same in Madras, which is with equal probability inconsistent with fact. As regards Bombay, excluding Sindh, the detailed return for the 10 years shows a net increase in the cultivated, that is, occupied, area of over 1,267,000 acres. The extension, however, of the survey revision to the districts of Kanara and Ratnagiri, previously left under the former system and not furnishing returns, and the inclusion of villages under special tenures not formerly entered in the annual tables, preclude comparison. In the case of Sindh again, the dependance of cultivation on the extent and time of the rise of the Indus, together with the change in the method of treating fallows in connection with record and assessment, renders the returns of the earlier years useless for the present purpose. As regards the cultivable waste land, it must be assumed in the majority of cases—in all, in fact, except those of outlying and half-populated tracts, such as Burma, Assam, the South Deccan and the sub-montane portions of the North-West Provinces and Bengal—that the bulk of the arable area still available is of a quality less remunerative to tillage than that already in occupation, and likely to yield, accordingly, a less return to the State resources when taken up. A good deal of the reduction, again, which appears in the above table, is attributable to the extension of forest reserves rather than of cultivation, a point which will receive notice later on, in connection with the special subject of forest administration. In the Panjab, apart from the large grazing tracts which are not likely to be required for cultivation for many years, much of the potentially remunerative arable waste awaits the extension of irrigation before it is brought under the plough. The Central Provinces, also, resemble so far their neighbour, the North-West, that most of the desirable land has been occupied, and new comers, for whom there is doubtless considerable room, must be satisfied with less fertile tracts, with the alternative of encroaching upon the area of reserved forest. As the subject of extension of cultivation is being now treated merely as a factor in that of the State revenue, it is unnecessary to enter more fully into the details, since what has been said above suffices to show that in the more settled Provinces any increase under the latter head is likely to take place at a gradually decreasing rate, whilst in the outlying tracts there is still the probability of an advance with considerable rapidity. In the permanently settled tracts of Bengal and Madras the whole financial benefit, whether from extended cultivation, competition for land or other advantages of settled government, has been permanently alienated from the public resources into private hands.

Connected with this latter point is the question of the number of persons immediately responsible to the Government for the assessment. It is impossible, owing to the great variety of tenure found in India, to show this in one Procrustean table, but the following, which is an abstract of the last return published by the Government of India, includes as much of the information as is readily available in a uniform shape.

## NUMBER of Estates held direct from the State, with Gross Area in Thousand of Acres:—1891–92.

| PROVINCE. | Estates Assessed at | | | | | | | | Present Proprietors Assessed Individually. | | Tenures wholly or partially Rent-free. | | Miscellaneous Tenures. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rupees, 50,000 and over. | | Rupees, 5,000—50,000. | | Rupees, 100—5,000. | | Rupees, 100, and under. | | | | | | | |
| | Estates. | Area. | Estates. | Area. | Estates. | Area. | Estates. | Area. | Estates. | Area. | Estates. | Area. | Estates. | Area. |
| Madras | 15 | 7,328 | 124 | 12,998 | 632 | 2,950 | 98 | 275 | 2,951,129 | 21,824 | 436,315 | 8,041 | 1,195 | 142 |
| Bombay | — | — | — | — | — | — | — | — | 1,193,489 | 25,663 | — | — | 4,957 | 8,401 |
| Sindh | — | — | — | — | — | — | — | — | 105,270 | 4,371 | — | — | 55 | 617 |
| Bengal | 53 | — | 855 | — | 20,784 | — | 132,237 | — | 7,358 | — | 197,954 | — | 21,399 | — |
| North-West Provinces | 2,909 | *1,418 | 5,669 | 4,380 | 62,710 | 2,003 | — | — | — | — | 4,042 | 2,003 | 136 | 125 |
| Oudh | 47 | 4,544 | 288 | 4,225 | 9,145 | 5,418 | — | — | — | — | 649 | 214 | 126 | 782 |
| Panjab | — | — | 4,141 | 4,283 | 32,101 | 50,861 | — | — | — | — | 130,248 | 6,648 | 572 | 436 |
| Central Provinces | — | — | 14 | 1,730 | 25,091 | 30,116 | 9,189 | 7,917 | 79,478 | 1,063 | 6,640 | 2,059 | 514 | 209 |
| Assam | — | — | — | — | — | — | 498 | 2,201 | 719,503 | 2,492 | 9,238 | 420 | 5,190 | 855 |
| Berar | — | — | — | — | — | — | 219 | 509,612 | 360,555 | 6,980 | 16,567 | 499 | 3,709 | 79 |
| Coorg | — | — | — | — | — | — | — | — | 15,101 | 25 | 9,577 | 50 | 6,607 | 79 |
| Ajmer | — | — | 8 | — | 58 | — | 1 | — | 54,669 | — | 13,439 | 174 | — | — |
| Upper Burma | — | — | — | — | — | — | 2,424 | 5 | 37,920 | 169 | 421,435 | 2,211 | 46,238 | 221 |
| Lower ,, | — | — | — | — | — | — | 47 | 68,575 | 941,338 | 5,546 | 767 | 55 | 7 | 34 |

* This figure is given in the Provincial Table, but obviously does not refer to estates of the rental stated in the heading.

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The general scheme of the return, it will be observed, takes into consideration the amount of assessment paid. In the Bombay Presidency, however, the system is to group by the area of the holding, or estate, in the case of land settled direct with the individual, and to classify other tenures by their local title. It is thus necessary to treat this province separately.

Madras.

In Madras the 869 large proprietors hold about as much land as the 2,951,129 peasant occupants. The last revenue return for this Presidency gives the zamindari estates, or those under permanent assessment, an approximate area of 19,100,000 acres, with an estimated revenue of Rx. 1,644,118, on which the State charge is Rx. 505,745. There is also a considerable area held here rent-free, or, at least, at reduced rates. In 1891-92 this extended to some 8,000,000 acres, held in 434,668 estates, with nearly double that number of sharers. Each estate contained about 18½ acres, and was assessed at about 7½ rupees. When we turn to the 21,800,000 acres held by the peasant proprietors, we find an average of 7 acres per holding, assessed at 14·974 rupees. The revenue records classify these estates somewhat more minutely, and we find that holdings assessed at less than 10 rupees each have increased proportionately from 64·9 per cent. of the total in 1887-88 to 66·14 in the year in question. On the other hand, those charged at a rate of from 10 to 30 rupees, which pay the largest amount of revenue of any of the classes, remained fairly steady throughout the five years, at 23·5 per cent., with a slight tendency to decrease. The increase in the former class is attributed to subdivision of larger estates on inheritance, and the continual recruitment of the lower grades of occupants from the large mass of field labourers.

| Assessment. | Percentage. |
|---|---|
| Under Rs. 10 - | 66·14 |
| Rs. 10–30 - - | 23·19 |
| „ 30–50 - - | 5·59 |
| „ 50–100 - - | 3·45 |
| „ 100–250 - - | 1·34 |
| „ 250–500 - - | 0·22 |
| „ 500–1,000 - | 0·06 |
| „ 1,000 and over | 0.01 |

Bombay.

In the sister presidency, if Sindh be excluded, there is an area of 25,663,000 acres, under 1,193,489 peasant proprietors. But of the latter, no less than 212,123 hold chiefly on reduced rates, or on special terms, mostly for village services, so that their assessment, acre for acre, is not more than half the normal rate. The proportion of small holders is roughly speaking, one-tenth less than that which prevails in Madras. In Sindh the holdings are considerably larger, and average 38¼ acres, assessed at 55·44 rupees, as compared with 22 acres and 23·76 rupees in the Presidency proper. There are then the special tenures, chiefly settlements known by local vernacular titles, such as talukdari, khoti, and narwa, &c. assessments, with an area, including Sindh, of over 9,000,000 acres, and a rent-charge to the State of Rx. 232,263. The latter falls, accordingly, at the rate of about 0·258 rupees per acre, and Rx. 463 per estate. Most of these classes of tenure are localised, the Talukdari in Gujarath, the Khoti on the Konkan coast, and the Mehwási in the forest tracts east of the former division of the Presidency.

| Average Acreage. | Fully Assessed Area. | |
|---|---|---|
| | Bombay. | Sindh. |
| 5 acres and under | 20·32 | 24·55 |
| 5–25 acres - - | 45·71 | 47·54 |
| 25–100 „ - - | 25·45 | 20·46 |
| 100–500 „ - - | 2·47 | 6·49 |
| 500 acres and over - | 0·05 | 0·96 |
| TOTAL - | 100·00 | 100·00 |

Berar.

In Berar, where the tenures much resemble those of the western Province, the villages held on special tenure are differently classed, and comprise mainly small grants assigned to military leaders or court favourites by the Moghal Emperor or his Deccan representative. Very few were granted by the Peshwa, and none by the Bhonslé offshoot of the Maratha power. A few villages are held on clearing or colonising terms; the grantee, that is, takes the land on condition of clearing the scrub or forest and settling cultivators on the land thus rendered fit for the plough. In return, he is exempt from assessment for a certain term of years, and gradually pays up to the normal rental. The individual proprietors hold and pay rather less than in Bombay.

North-West Provinces.

In the North-West Provinces the bulk of the land is held in estates of about 450 acres, at about a rupee an acre, or a trifle more. Next to this class of estates come those of about 160 acres, assessed at slightly lower rates, with a considerable number of estates of larger size, nearly 800 acres, bearing heavier rates, but, like the rest, much subdivided. For instance, against 4,285 estates of this size there are seven times the number of sharers, and in the class above, nine. In the lower grades the sharers are still more numerous relative to the recognised proprietors, and average between 23 and 24 to one. The same feature pervades the

the small number of individual proprietors, who hold about 115 acres each. The whole Province shows a mean area of 366 acres per estate, at 384 rupees each, or 17·45 rupees per sharer. This, however, includes nearly 4,000 holders at specially reduced rates, or, in some cases, rent-free, on whom the charge falls, as in Bombay, at about half the normal rate. The return for Oudh comprises only the tenures direct from the State. Here the large landholders predominate, and more than half the area is held in estates assessed at from 5,000 to 50,000 rupees per annum. The number of such estates is returned altogether as 335, with an average of 26,175 acres, but the 47 leading proprietors have an average of 96,672, assessed at about 0·88 rupees per acre. The villages at a lower rental, which constitute the next largest item in the return, are assessed at the higher rate of 1·118 rupees. An interesting section of the return is that which shows the average area and assessment of the estates not direct from the State, that is, of the sub-tenures with or without rights of occupancy, as the case may be. The law with respect to Oudh tenants having been placed on a better footing within the decade, this information is of the greater value. Of the higher class of tenants, who have both heritable and transferable rights in the soil, each holds on an average some five acres of land at 0·589 rupees per acre as their private land, and about six acres at 2·187 rupees if they rent on the ordinary terms. The second grade of tenant, who has heritable but not transferable rights, holds over seven acres at 2·922 rupees. The tenant without rights of occupancy against his landlord, but protected by the provision of the Rent Act, is shown to hold nearly three acres, at the higher rate of 4·198 rupees for each. There are two other grades of tenants, each with an estate of about the same area—namely, three acres—one paying 3·453 rupees, the other 4·359 rupees. On the whole, whilst those holding direct from the State pay about 0·952 rupees per acre, the average rate imposed on the tenantry is about 3·50 rupees.

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Oudh.

In the general return the entries for the Panjab are classed for the most part under two heads, first, the estates which pay from 5,000 to 50,000 rupees per annum as the State charge, and, secondly, those paying between 100 rupees and 5,000 rupees, of which the latter class largely predominates. In the former the average area is shown as 1,034 acres, assessed at 0·329 rupees per acre. The other class contains larger estates, and the mean area of each, which is 1,584 acres, bears an acreage rate of 0·468 rupees. There is also a considerable area of land held wholly or partially free of assessment to State revenue, by about 130,250 assignees. In the local returns the villages are grouped according to proprietorship. By far the greater number come under the head of "shared" or communal estates, the largest class of which, known as the "bhaiachára," have a mean area each of 1,824 acres, assessed at 0·453 rupees per acre. The different groups, however, do not, in the case of all the larger items, vary much in respect of the rate. The highest shows a mean of 0·516 rupees, and the lowest, that where the village is held by a single proprietor, of which there are but 1,206 out of a total of 36,814, descends to 0·229 rupees. If we inquire below the village unit, it will be found that the total number of holdings is over 6,917,000, out of which 2,991,000 are owned by the person cultivating them, and 3,632,000 occupied by tenants. The former have a holding averaging slightly over 4½ acres each, the latter one of about 3¼ acres. Tenants-at-will outnumber those with occupancy rights by about four to one. The rents paid in this Province vary more than usual, and the greater number of the tenants pay in kind, with or without a cash addition. The marginal table shows the extreme rates returned for 1891–92 as paid on the various descriptions of land. The last class, that irrigated from both well and canal, is only returned from comparatively few districts. In the case of the rest, the return from which these figures are taken shows great variety.

Panjab.

| Class of Land. | Highest. | | Lowest. | |
|---|---|---|---|---|
| | Rate. | District. | Rate. | District. |
| | Rs. | | Rs. | |
| 1. Dependent on rain | 34 | Hoshiarpur | 0·042 | Kohat. |
| 2. Alluvial | 19 | Ludhiana | 0·297 | Dera Gházi Khan |
| 3. Irrigated by wells | 52 | Hoshiarpur | 0·250 | Dera Ismail Khan. |
| 4. Irrigated by canals | 12 | Ambala† | 0·500 | Hissar. |
| 5. Irrigated by wells and canals | *16 | Ludhiana | 1·062 | Dera Gházi Khan. |

* Omitting Simla, where it is shown as Rs. 21,406.
† Omitting Hazara, where it is shown as Rs. 40.

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variety even within a single district, throughout the Province; but in most cases the rent is considerably above the State charge, as in Oudh. Where the rent is in cash, however, it frequently represents little more than the above charge, together with the local cesses for special purposes.

Central Provinces.

In the Central Provinces, again, we find 70 per cent. of the land held by proprietors assessed at between 100 and 5,000 rupees. The number of these estates was, in 1891–92, 25,105, giving a mean area of 1,270 acres each. This figure, however, is by no means typical of the whole, as it appears that the majority have an area of just under 1,000 acres, and that 42 exceed 160,000, and five have an average of nearly 220,000 acres each. It is equally remarkable to find in the lower grade, paying less than 100 rupees each, an average of 761 acres over nearly 9,000 estates, with one group of 13 estates averaging 87,000 acres each. It has been already pointed out that the incidence of the State charge is here the lowest in India. For instance, the largest estates indicate a rate of 0·048 rupees per acre. The next in size, of 0·010 rupees, whilst the largest group numerically, that paying between 100 and 5,000 rupees, is assessed at 0·239 rupees per acre. Lower down in the scale, again, the rate approaches that of the highest estates, and is given as 0·059 rupees, whilst those estates of which the area averages, as above stated, nearly 87,000 acres, contribute to the State Treasury in the form of land revenue a sum per acre represented by the fraction 0·00032. The whole Province has a mean area per estate, or holding, of 356 acres, assessed at 57 rupees, or 0·160 rupees per acre. The peasant proprietors, numbering 79,478, who hold over a million acres, at the rate of 13 acres each, pay at the rate of 0·538 rupees, or 125 per cent. in excess of that of the main body of proprietors. The tenants' rights of this Province are somewhat complicated, but, as a rule, the higher class hold a strong statutory position relative to the proprietor, who cannot disturb their occupancy. Nevertheless, the latter holds 18 per cent. of the total occupied area dealt with in the return. The rent paid by the various classes of tenants is specified marginally. Three-quarters of the land is thus held at a rate very considerably in advance of that paid by the most heavily assessed proprietors, and exceeding that charged on the individually assessed peasantry by 0·248 rupees.

| Class of Tenant. | Rent. | Percentage of Area. |
|---|---|---|
| | Rs. | |
| 1. Absolute occupancy | 0·865 | 13 |
| 2. Occupancy | 0·698 | 33 |
| 3. At will (by occupancy tenants) | 0·771 | 5 |
| 4. At will | 0·865 | 23 |
| TOTAL | 0·786 | 74 |

Burma

The bulk of the land in Lower Burma is held by peasant proprietors, whose estates average just below six acres, for which they pay 8·594 rupees, or about 1·459 rupees per acre. The number of large estate holders is only 47, and their average property is not very different in extent from the Panjab village, being 1,459 acres, bearing an assessment of 0·648 rupees per acre, which is a considerable advance on that imposed on the more northern landlord. In the Upper division of the Province the principal item shown in the returns is that of estates not recorded as State land, a term which has a special signification in this part of the country. The area not so reserved is held to be the property of the occupant, and is at present subject either to assessment, as the survey and settlement operations are extended, or to the tháthameda, or household impost, mentioned in a former part of this chapter. The average holding is about $5\frac{1}{4}$ acres, or rather larger than that of State tenants. It is unnecessary to enter into the question of incidence, as the charge is not based on area but population. On the small area of 325,000 acres shown as settled by peasant proprietaries or corresponding estates the assessment is set down at the rate of 3·120 rupees per acre, or about 14 rupees per holding.

Bengal.

The returns for Bengal are necessarily less complete than those for the provinces where the assessment is liable to periodical revision. In 1891-92 the area here returned as cadastrally surveyed was only 821,626 acres, out of a total of 93,241,858, of which an estimated area of 52,828,300 acres were under crops. There is a return published which gives the number of estates under each of the main groups adopted in the Government of India's annual table; but,

but, owing probably to want of uniformity in the system of compilation, the district figures are not combined into a return comprising the whole Province. The total, however, whether significant, useless, or misleading, is shown in the margin, and gives a mean area of 223 acres per estate. In the local return dealing with the year's administration of this branch of the revenue the number of estates is much smaller. Here the estates are grouped according to tenure, irrespective of area or revenue. We thus find the permanently settled estates number 156,457, the temporarily settled, 9,493, and the Government estates, which include what are termed peasant proprietary tracts, 2,281; or, in all, 168,231. This would allow an average state-charge of 226 rupees on the whole. The group averages are 206 rupees in the case of the permanently settled estates, 282 rupees on the second group, and 1,419 rupees on the Government estates. The tendency seems to be in the direction of partition of the middle-sized estates, as in 1881-82 the total number was 151,934, of which 141,391 were permanently settled. The tendency was especially noticed in Bihar in 1882–83, when the number of estates was shown to have increased in the Patna Division, in 20 years, from 25,841 to 48,495. Again, in 1891-92 the number was returned as 59,013, and, of 647 partitions effected during that year, no less than 447 were from this same tract, and 1,679 were pending there at the end of the period under review. As regards the assessment, in default of provincial totals, it is necessary to select for comment the highest and the lowest figures found in the district returns, excluding the tracts where the information is incomplete, such as parts of Chutia Nagpur, and the sub-Himalayan districts of Darjeeling and Jalpaiguri. In the following Table, accordingly, these rates per acre are set forth for the different physical divisions of the province:—

| Assessment. | Number. |
|---|---|
| 1. 50,000 rupees and over | 53 |
| 2. 5,000–50,000 rupees | 855 |
| 3. 100–5,000 rupees | 29,784 |
| 4. 100 rupees and under | 132,237 |
| 5. Peasant proprietors | 7,358 |
| 6. Rent-free or at reduced rates | 197,954 |
| Others | 21,399 |
| TOTAL | 389,640 |

| DIVISION. | Government Estates. | | | | Proprietary Estates. | | | |
|---|---|---|---|---|---|---|---|---|
| | Highest. | | Lowest. | | Highest. | | Lowest. | |
| | District. | Rate. | District. | Rate. | District. | Rate. | District. | Rate. |
| | | Rs. | | Rs. | | Rs. | | Rs. |
| East Bengal | Chittagong | 2·172 | Dacca | 0·714 | Bakarganj | 0·630 | Maimansingh | 0·203 |
| North Bengal | Rangpur | 3·547 | Rajshahi | 0·624 | Dinajpur | 0·630 | Rangpur | 0·453 |
| Central Bengal | Bardwan | 5·661 | Nadia | 0·312 | Nadia | 1·625 | Bankura | 0·271 |
| Chutia Nagpur | Hazaribagh | 0·953 | Singhbhum | 0·437 | Hazaribagh | 0·375 | Singhbhum | 0·005 |
| Orissa | Balasore | 0·937 | Puri | 0·500 | Cattack | 0·651 | Balasore | 0·302 |
| South Bihar | Shahabad | 1·859 | Gaya | 1·151 | Shahabad | 0·568 | Gaya | 0·458 |
| North-West Bihar | — | — | — | — | Saran | 0·745 | Champaran | 0·229 |
| North-East Bihar | Monghyr | 2·417 | Purnea | 0·380 | Purnea | 0·375 | Bhagalpur | 0·198 |

In many cases the area held direct from Government is very small, and in Chittagong, Palamau, and Singbhum only does it exceed that in the hands of zemindars, or proprietors. The provincial mean, therefore, of 0·461 rupees is but slightly in advance of the mean proprietary rate. This last has been estimated at about one-fifth of the net rental, or profit derived from the land by the class with which the settlement of 1793 was made, or the intermediaries who have since sprung up between the proprietor and the actual cultivator of the soil. In connection with the tenantry, who form so numerous a class in this Province, it is worth while to quote here the remarks of the local Revenue Board on the results of the legislation of 1885, which has been noticed in the fourth chapter above. The Act in question was, undoubtedly, one of the most important, if not the most important, measures passed regarding agrarian interests during the 10 years under review, and the opinion of those who have the duty of supervising its administration, which is obviously that of experts, is both valuable and interesting, even though it may not be encouraging as to the

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results of legislation on which so much time and trouble was spent, and from which so much was expected. "The Act," write the Members of the Board, "so far as it has had any effect at all, has worked satisfactorily, but several of its provisions, to which considerable importance was attached during the discussions on the Bill, and when the Act was passed, such as the commutation of rents in kind and the registration of improvements, have either remained a dead letter or have been resorted to only in an insignificant number of cases. The chief object of the Act was to protect the rights of the raiats, and in this, it is believed, it has had as much success as any measure of the kind ever passed before. In the opinion of the Commissioner of Rajshahi, 'the introduction of printed receipts for rent, in particular, has laid the foundation of a system of automatic record which is gradually removing the great agrarian evils of Bengal, the uncertainty of all zemindar's demands, and the fraud for which that uncertainty furnishes an opportunity.' But the Board observe that the use of these receipts is not yet by any means universal, or even common, in some parts of the Lower Provinces, and until this defect is remedied, it cannot be said that this law has had the effect claimed for it by the Commissioner. In some districts the Board are informed that the raiats are unwilling to take these formal receipts lest they should afterwards be used against them to prove that their occupation of their holdings commenced with the grant of these documents. In the opinion of the Board the power of transfer of their holdings, which has undoubtedly been increased by the Tenancy Act, is an unmitigated evil from a raiat's point of view, and many raiats are now under-tenants at a rack-rent on their old holdings, which have passed into the hands of money-lenders."

This lengthy quotation has been made, not solely by reason of its bearing upon the special measure in question, the amendment of which, in the opinion of the local government, has not been shown as yet to be necessary, though the full benefit of its provisions is not likely to be reaped until a survey and continuously maintained record of rights have been thoroughly and universally established. But the extract also throws so strong a light upon one or two of the general difficulties with which the State has to contend, even in the Province where it has divested itself to so great an extent of its direct connection with the administration of the land, and which occur, more or less prominently, in every Province in India.

Assam.

The southern valley of the Province of Assam was settled on the same terms as Bengal, to which it socially and geographically belongs, and nearly all the 3,800,000 acres of land held on proprietary tenure is found in the two districts of Sylhet and Goalpara. In the Brahmaputra Valley and the hill tracts, on such portion of them as has been brought under settlement at all, the prevailing arrangement is with the individual occupant. There are thus 719,300 estates out of 783,700 individually recognised, and about 50,000 larger units, chiefly paying annually less than 100 rupees each to the State. The number of special arrangements regarding the land in Assam is above the average, owing to the nature of the country and the need of encouraging by special concessions the clearing of forest and the establishment of settled colonies of trained cultivators. In point of assessment, the Zamindari land of the Surma Valley and Goalpara pays on an average 0·101 rupees per acre, whilst that held in peasant-proprietary is assessed at 1.457 rupees. Thus, the group of the largest estates comprises only 500 estates, showing an incidence of 0·074 rupees per acre, on an average estate of 4,420 acres. The next group contains 49,515, each paying less than 100 rupees per annum, and containing on an average 32 acres, assessed at 0·137 rupees. The peasant who holds direct, on the other hand, occupies a mean area of 3½ acres only, on which he pays 4·88 rupees, or at the rate of 1·410 rupees, allowing for the inclusion of a few of the special tracts assessed at an unusually low rate.

Settlements.

It is not proposed to enter into the details of the smaller Provinces. Nor will space allow more than a brief mention of the settlement operations of the last few years, the results of which appear, in the gross, in the revenue returns. The general feature of the new system of settlement has been already described as the utilisation of the results of preceding surveys and classification, so far as investigation may have proved the latter to be trustworthy, a quality which, it is assumed, will indubitably appertain to all of the operations now in progress, or which have been undertaken during the last five or six years. In the Financial Statement of 1888–89 a special section was devoted to this subject, based

based on materials furnished by Sir Edward Buck, C.S.I., the Secretary to the Government of India in the Departments of Revenue and Agriculture, and the initiator of the new departure. The estimate of the saving to be thus effected was then based on the assumption that the maximum expenditure on re-settlement would not be more than Rx. 10 per square mile. Applying this rate to the Provinces concerned, the results showed a saving estimated to reach ultimately Rx. 236,500 per annum. Part of this has been already realised, and there is a fair prospect of achieving much, if not all, of the remainder. LAND REVENUE AND ADMINISTRATION.

It is usual in the annual numbers of this review to give details of the settlements effected during the twelve months to which the review relates. It would be desirable, no doubt, to take stock, so to speak, in this manner, of the progress of the last 10 years, and to ascertain and show in this decennial form the proportion of the increase in land revenue that is due to increased rates of assessment, and that due to the general expansion of agriculture. It is impracticable, however, to do this within the compass of a review such as the present, and it is open to doubt, moreover, whether the two factors could be separated except in the tracts entirely under peasant proprietors, where, as already mentioned, the extension of cultivation is at once reflected in the revenue returns, though it can only be exhibited for the whole tract concerned after laborious re-arrangement of the tables. A brief comment upon the operations of 1891–92 is, however, advisable in order to bring this review into line with its fellows, though the allotted space allows of but a very general notice.

In Madras, five districts were in process of revision. The new rates were introduced into two sub-divisions of the unfortunately situated districts of Anantipur and Bellary, and into a portion of Godavari and South Arcot, resulting in an increase of Rx. 9,326. The rich district of Tanjore, which yields almost the highest land revenue of any corresponding unit in India, was completed within the year 1891–92, though the settlement was not confirmed till later. The rate of increase is 26 per cent., that is, where Rx. 410,690 was paid the assessment is now to be about Rx. 520,000. Work was also continued in the Malabar district. The increase in the revenue amounted to 13·14 per cent. on the total outlay of both survey and settlement departments. In the preceding year the ratio was 13·06 per cent. Madras.

In the Bombay Presidency revised rates were introduced into 662 villages, contained in nine sub-divisions of various districts, in addition to 40 villages the revenue of which is alienated to private individuals. The net results were that from Rx. 72,052 the assessment rose to Rx. 92,687, or by 28·6 per cent. The increase in the alienated villages amounted to 50 per cent. Two of the sub-divisions settled are in the rich plain of Khandesh, and of one of those in Satara a proportionate reduction will ultimately be affected before the rates come into operation, that is, a year after the introduction. In Sindh only irrigational settlements were completed. Bombay.

In the North-West Provinces the Saharanpur district operations were completed, but not in time for review within the revenue year. The Muzaffirnagar settlement was in the same position. The Jhansi results show a general rise of 13·28 per cent. over the former assessment. The Kumaon sub-montane tract, known as the Bhabar, was nearly finished, showing an increase of Rx. 3,800, which is considered fair in such a tract. The other hill district, Garhwal, is less forward in its operations, and the rules for the assessment of its peculiarly situated population were not ready by the end of the year. Work progressed in Unao, where these sub-divisions yielded an increase of 18·27 per cent. of revenue. In two other districts of Oudh the operations have been commenced, and four more were to be brought under settlement from October 1892. North-West Provinces and Oudh.

The three districts of Hissar, Gurdaspur, and Firozpur were re-settled during 1890–91, and though the new rates were introduced during the succeeding year, the details were reviewed in the former. The establishments engaged in these districts were either drafted to Peshawar, where operations have been begun, or absorbed into the local staff of the district, where they have been employed. In 10 districts, including Peshawar, re-settlement is in progress, but not completed within the year save in Gujrat, where the enhancement of about Rx. 15,000 per annum is estimated to cover the cost of settlement within two years. In Gujranwala the results are expected to be much the same. Those in Kangra are to some extent less favourable, owing both to the greater difficulty and cost of the work and the smaller enhancement. The Shahpur Panjab.

LAND REVENUE AND ADMINISTRATION.

settlement is reported to have been highly successful. The enhancement is estimated to ultimately reach Rx. 25,000 per annum. The rest of the settlements were only in the preliminary stage at the expiration of the decade under review

Central Provinces.

No district was actually completed during 1891–92 in the Central Provinces but the re-assessment proposals for the three important districts of the eastern, or Chattisgarh, division were submitted for sanction by the end of the year. Both survey and settlement operations were far advanced in Jabalpur and Damoh by the same date, and six other districts were in hand. The cadastral survey, which here precedes settlement, was all but finished. The out-turn of the year amounted to 3,320 square miles, at an average cost of 40 rupees per mile.

Assam.

In Assam, too, the cadastral survey accomplished 828 miles, with nearly 900 miles in the Traverse branch of the department. The settlement operations in this Province are mostly divided into the comparatively petty work in connection with special (ilám) estates in the Surma Valley, of which 16 were disposed of in 1891-92, and the ordinary survey and settlement in the Brahmaputra Valley. About 342,740 settlements, comprising over 655,000 acres, were concluded in the year, as well as 657 decennial leases.

Bengal.

In Bengal settlements are made of Government estates throughout the Province, of entire districts, as in Chittagong and the small estate of Angul, and of Wards' and private estates. In the temporarily settled tracts and on Government estates, the number of holders whose status was determined during the year was 194,343, and the rentals increased by the re-settlement, from Rx. 28,360 to Rx. 43,367. On Wards' estates the work included the settlement of nearly 105,000 holdings, with an increase in the rental of Rx. 7,800 over the Rx. 72,762 of the previous arrangements. On private estates, though the number of holdings, 3,988, was much smaller, the increased rental was considerably larger, being Rx. 9,000 over a former roll of Rx. 28,734. As regards the more extensive undertakings, in Orissa the testing and classification of plots went on, and soil-maps had been prepared for 619 villages by the end of the year in question. In Angul the settlement was approved by the local government, and the new rental, which will be eventually Rx. 9,993, instead of Rx. 4,594, is to be realised gradually; that is, for five years only Rx. 7,293 will be demanded: then, Rx. 8,643. The soil-maps for the Chittagong district were under preparation during the year; meanwhile the records were got ready for check and attestation. The rest of the work needs no special remark, as the cadastral survey of Behar was not taken up during the period now being dealt with.

Burma.

During 1891-92 one survey party was employed on cadastral work in each of the two divisions, with a third which worked between the two. In Lower Burma they completed in all 1,010 square miles. Local survey parties also accounted for 1,566 miles. As to settlements, the Amherst district was taken in hand as soon as the operations in Thongwá had been completed. The latter resulted in an increase of Rx. 21,273 per annum. Supplementary survey parties were also employed in Bassein, Akyab and most of the Pegu and Irawadi divisions, and accomplished 2,861 miles. In Upper Burma 2,602 miles were cadastrally surveyed under the general scheme, which provides for the completion of the whole by the year 1,900. Local surveys of small tracts were also employed. The Kyanksé district was settled, but the assessment not introduced before the close of the year. Mandalay was then begun.

Wards' Estates, &c.

The last topic in connection with the administration of the land that need be mentioned here is the action of the State in reference to Wards' estates and others specially taken under management. These are dealt with on different systems in each Province, and in some of the latter, as in Bengal and Madras, the charge is a heavier one on the administration than in others, such as Bombay, where State aid is but rarely called in for the purpose. The chief features in the year 1891-92 will probably suffice to indicate the general character of this branch of public responsibilities.

Madras.

In Madras there were 52 such estates under management; five were restored to their proprietors, and four new ones were taken up. Forty-four of the ward are minors, five are incapacitated for management by sex alone, as they are ladies, and the other three are lunatics or imbeciles. The area of those estates is 775,913 acres, of which 91 per cent. was under cultivation. One of the estates handed back had a revenue of Rx, 6,007 when taken under management, and of Rx. 7,104 at the expiration of the 9¼ years of administration. Debt was paid off

to

to the amount of Rx. 4,479. Rx. 694 were spent on irrigational works, and the cash balance, which was Rx. 1,384 at the beginning, was Rx. 4,664 at the end of the term. Most of the minors are under instruction. Nine suits were pending or decided in connection with Wards' estates under management. LAND REVENUE AND ADMINISTRATION.

In Bengal a distinction is drawn between Wards' estates, of which there were in 1891-92, 75, and Attached estates, of which the number was 69. The amount due to the estates of both classes is set down as Rx. 1,692,012, and they owed Rx. 370,501. The opportunity of minority or other cause of taking over the estate is generally used to have it surveyed, and 7 wards' and 13 other estates were in hand during 1891–92. Of the larger estates the chief is that of Burdwan, with a current revenue of Rx. 452,500. Two others have a rent-roll of Rx. 60,000, and about 10 others have one of over Rx. 10,000. The estates coming under the Chutia Nagpur Encumbered Estates Act VI. of 1876, will be mentioned below. Bengal.

In the North-West Provinces there were 116 estates under management during the year. The total revenue was Rx. 257,878, and the cash balance increased from Rx. 46,795 to Rx. 81,946. The local Government again note the small amount expended on improvements of the estates by the managers. Eighteen estates are managed by the State on application by their owners, in consequence of the inability of the latter to clear off their liabilities. The debt still owing at the end of the year was Rx. 84,693, and several of the estates are now free. In Oudh three estates were under the Encumbered Estates Act, eighteen belonged to minors, and sixteen to disqualified proprietors, or thirty-seven in all. The income during 1891–92 was Rx. 235,743, and the expenditure Rx. 236,039, so the cash balance at the close was slightly reduced. The debt still owing by the disqualified proprietors was Rx. 71,668, with a cash balance of Rx. 3,331. The debts on all the estates together amounted to Rx. 322,354 at the beginning of administration, and to Rx. 254,106 at the end of 1891–92. North-West Provinces and Oudh.

The number of estates under management in the Panjab was increased by seven in the year, at the end of which there were 63 thus situated. The Mamdot Nawab was the most important of the new charges, as he is only two years of age with a large estate. Since the end of the year the estate of the Nawab of Tank has been released. The local authorities report that the management of these charges was on the whole distinctly satisfactory, and a surplus income of Rx. 31,918 was realised. Here again, however, there has been occasion to comment on the preference of local managers to put by or invest balances which might preferably be expended on much wanted works of public utility on the estate. Panjab.

There were no less than 133 estates in the Central Provinces under State administration. Of these 67 came under management owing to the minority of their owners, two owing to mental incapacity, and 64 on account of disqualification. Thirteen estates were released, and the same number brought on to the list. The total income for the year was Rx. 171,549, and Rx. 135,881 were spent. The improvements on solvent estates are stated to be retarded by the want of adequate professional advice on questions of engineering, and the removal of this obstacle to some extent was taken into consideration by the local authorities during the year. Nearly all the minors are at some place of education, or other, either away from home or otherwise. Central Provinces

In Bombay and Sindh the chief estates that come under State administration are those of Talukdars, or proprietors of the ancient ruling clans, in Gujaráth and Sindh. There are about 469 other estates managed by the district authorities, the largest containing over 28,000 acres. In Gujaráth, 117 talukdári estates were on the roll, with a gross income, including arrears, of Rx. 29,278. One estate was released in Kaira and another at Ahmedabad. The former owed at the end of the year Rx. 18,121 ; the latter, Rx. 29,126. In the Broach district the outstanding liabilities of the seven estates amounted to Rx. 6,442. In Sindh 30 estates remained at the end of the year, and 15 were released during that period. Here the debts, though numerous, are relatively small, and in every district the result of the management is a surplus, a good part of which is available to pay off the loan from the State by means of which the more important estates were cleared of debt. Bombay.

The most noteworthy feature in the working of these Encumbered Estates provisions is the continuous need of them. The total number of persons entitled to relief under such enactments is necessarily limited, but we find in Gujaráth 108 estates under management in 1881-82, and nine more after

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after an interval of 10 years. In Sindh the law has been changed on more than one occasion, so the decrease from 349 to 30 may be due to special and artificial causes, rather than to increased providence. In the case of Jhánsi, where the persons for whose benefit the special local Act was passed are of a lower social position than the Talukdars of Gujaráth, it was ascertained that the loan advanced by the State from public funds to keep the agricultural proprietors on their land was repaid by loans from the village money-lender, who closed in some way or other on the disembarrassed land as soon as it was out of management. In Bengal the Chutia Nagpur Encumbered Estates Act was applied in 1891–92 to 59 estates, and in 1881–82 to 72. The amount of debt at the close of the former year was Rx. 163,749, and Rx. 66,192 of this was ascertained during the year in question. In Oudh, again, the supply of indebted local magnates appears perennial. The whole question of agricultural indebtedness is far too wide a one to be dealt with in a general review of this sort. A few facts and conclusions with regard to it will be added in the final chapter, though only an outline of the subject can be given. The stimulus to get into debt lies deep in the social system, so that legislation and other outside action can scarcely reach it. With this remark must be closed the account of the land revenue administration. It is admittedly no more than a sketch, but it may possibly suffice to explain the general method in which the largest landlord in the world deals with his estate.

## OPIUM.

Opium.

The waning proportion of the revenue from opium to the total State income has been noticed in the previous chapter, and may be further judged from the figures given in the margin which show the amount of the gross receipts and their ratio to the total during the last 50 years. The greater portion of the revenue is derived from sales for shipment to China and the Straits Settlements, especially, of course, from the former, and it is chiefly from causes arising in that country that the receipts have failed of late to hold their former position in the finances. The special character of the opium revenue has recently attracted much attention in England, and the more important communications with reference to it that have passed between the Secretary of State and the Government of India have been presented to Parliament in separate publications. For these reasons, it is not necessary to enter here into more than the administration of this branch of the State resources in India, more especially as certain aspects of the question are just now under inquiry by Royal Commission, the report of which has not yet been issued.

| Year. | Gross Revenue.* | Percentage on Total Gross Revenue. |
|---|---|---|
| | Rx. | |
| 1842–43 | 2,088 | 9·2 |
| 1852–53 | 5,088 | 18·0 |
| 1862–63 | 8,055 | 17·4 |
| 1872–73 | 8,685 | 15·4 |
| 1882–83 | 9,499 | 13·5 |
| 1892–93 | 8,012 | 8·9 |

* In thousands.

History of the Opium Revenue.

It is not clear from the records that throw the only attainable light on the early history of India whether the consumption of opium was customary amongst the earlier inhabitants of the country, but authorities are apparently in favour of the hypothesis that the drug was introduced from Persia by the Musalman invaders. It was certainly cultivated along the Western coast soon after the Arabs began to frequent that tract, and rapidly spread to Malwa. But in the days of the Moghal Emperor Akbar, his chronicler, Abu'l Fazal, seems to indicate the present Bihar and Ghazipur fields as the chief source of supply. The cultivation was made a State monopoly by the above monarch, and it is an interesting detail in the record of his administration that the lowest rates charged on land growing opium during the cycle of 19 years quoted were considerably in advance of the highest of those charged on land reserved for wheat. In 1773, the monopoly passed over to the British, but it was not until 1781 that the administration of it was assumed by the East India Company. In the interval, the management seems to have been left to joint contractors, one of whom, a Brahman, has left an interesting and detailed account of the traffic.

Production of Opium.

The revenue from opium in the present day, it may be mentioned, is partially credited to Excise, under which head it appears in the accounts. This portion of the receipts will be noticed later on in this chapter. For the present,

present, the more important branch of the subject must engage attention. The poppy is cultivated mainly in the tracts above mentioned, namely, the protected States of Malwa in Central India, in the south-eastern portions of the North-West Provinces and Oudh, and in Bihar. There is a little cultivated for the local supply in the Panjab and some of its attached Hill-States, but this need not be here considered. The opium production in Malwa is controlled by the chiefs, who derive a considerable portion of their revenue from it. On its exportation into British territory a duty is levied on a pass which covers the transit through that territory to Bombay, from whence it is exported to China, a portion being reserved for Indian consumption. In the other tract, conventionally known as the Bengal opium district, the extent of cultivation and the quantity of opium to be annually brought into the market are regulated by the Government of India, in consultation with that of Bengal. A special department looks after the details of the subdivision, arranges with the cultivators the extent of their land which they wish to put under poppy, and sees that the inspissated juice is not disposed of to anyone except the agents for the State supplies. The price at which the crude opium is to be made over to these agents is notified before the annual agreements are concluded. The advances made to the cultivator in consideration of this crop are prominent features in the transaction. They can be made to the number of five during the season, at different acreage rates, and are said to often carry the agriculturist over a bad season or over the interval between two grain harvests. The produce, when ready, is either stored as "provision" to steady the market and to provide against short crops in future years, or as "excise," for issue to the licensed dealers of Bengal, the North-West Provinces, Assam, the Central Provinces, and Burma, at the uniform rate of, at present, 7·25 rupees per ser, or a little over two lbs. In the last 20 years, it may be observed, the reserve has once fallen to 24 chests, and has risen, in 1889, to 49,700. During 1891-92 it was returned at 9,292. The excise rate, it is necessary to point out, is always fixed high enough to render it unprofitable to buy it for exportation abroad in substitution for the "provision" supply. Special regulations are in force in Western India for the supply of opium to the numerous Protected States under the Bombay Government, but Baroda provides its own stock. In Bengal, conventions exist between the British and French Governments regarding the supply to Chandernagore, the small *enclave* of the Hughli district. The present agreement, which dates from 1888, runs for five years, and specifies an annual payment of Rx. 500 by the former in commutation of the French opium rights.

Opium.

The net revenue during the decade distinguishing the two classes of opium has been as shown in the margin. The charges on account of the Malwa article are trifling, varying between Rx. 1,881 and Rx. 4,052 per annum. They consist of the cost of the weighing establishment at the sanctioned routes by which the opium has to enter British territory. In the case of the Bengal drug the difference between the gross and the net revenue is far wider. The charges include manufacturing expenses and establishment under the Agencies, but the main item is that of advances to the cultivator, which, except in particularly bad seasons, like those of 1883-84, 1889-90, and 1891-92, exceed Rx. 2,000,000. The above figures, it may be stated, are for the financial year, April to end of March, but the opium year comprises the period between October and the end of the next September.

Revenue.

| Year. | Charges. | | Net Revenue. | | |
|---|---|---|---|---|---|
| | Bengal. | Malwa. | Bengal. | Malwa. | Total. |
| | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1881-82 - - | 2,055,430 | 1,905 | 5,620,206 | 2,183,014 | 7,803,220 |
| 1882-83 - - | 2,280,935 | 1,881 | 4,822,669 | 2,393,779 | 7,216,448 |
| 1883-84 - - | 1,852,479 | 2,211 | 5,193,400 | 2,507,700 | 7,701,100 |
| 1884-85 - - | 2,962,929 | 2,908 | 3,313,793 | 2,536,450 | 5,850,243 |
| 1885-86 - - | 3,053,622 | 4,052 | 3,436,781 | 2,447,844 | 5,884,625 |
| 1886-87 - - | 2,725,200 | 3,863 | 3,630,952 | 2,582,893 | 6,213,845 |
| 1887-88 - - | 2,420,782 | 3,793 | 3,824,356 | 2,266,402 | 6,090,758 |
| 1888-89 - - | 2,593,951 | 3,954 | 3,999,804 | 1,964,561 | 5,964,365 |
| 1889-90 - - | 1,601,099 | 4,008 | 5,091,037 | 1,886,846 | 6,977,883 |
| 1890-91 - - | 2,177,133 | 3,664 | 3,947,963 | 1,750,423 | 5,698,386 |
| 1891-92 - - | 1,857,912 | 3,901 | 4,310,187 | 1,840,380 | 6,150,567 |

NOTE.—The pass-fee on Malwa opium stood at Rx. 70 in 1881, It was reduced to Rx. 65 in 1882, and in 1890 to Rx. 60. But since 1882, the fee on Malwa opium intended for Indian consumption has been Rx. 72·5 at Ajmer, and Rx. 70 elsewhere. The fee on this last is credited to Provincial revenues, whilst that on opium for export is passed to the Imperial Account.

OPIUM.

Area under Poppy.

It is interesting to see the changes in the areas under poppy in the two Bengal Agencies during the last 40 years, so these are given in the margin.

| Year. | Bihar. | Benares. | Total. |
|---|---|---|---|
| | Acres. | Acres. | Acres. |
| 1851–52 | 201,550 | 86,151 | 287,701 |
| 1861–62 | 248,907 | 139,321 | 388,228 |
| 1871–72 | 311,126 | 224,326 | 535,432 |
| 1881–82 | 287,738 | 243,537 | 531,275 |
| 1891–92 | 234,741 | 228,923 | 463,664 |
| 1882–83 | 246,395 | 249,345 | 495,740 |
| 1883–84 | 249,699 | 256,144 | 505,843 |
| 1884–85 | 270,726 | 294,520 | 565,246 |
| 1885–86 | 283,446 | 311,475 | 594,921 |
| 1886–87 | 286,416 | 275,636 | 562,052 |
| 1887–88 | 279,849 | 256,758 | 536,607 |
| 1888–89 | 253,666 | 206,198 | 459,864 |
| 1889–90 | 248,893 | 233,664 | 482,557 |
| 1890–91 | 254,975 | 246,744 | 501,719 |

The chief general feature is the falling off during the last few years of the decade under review in both tracts, as compared with the areas under poppy between 1884 and 1887. Then, too, it may be noted that the fluctuations in the more western tract have been wider than those in Bihar. At one time the area in the former exceeded those in the latter, but for the last six years they have been below. In both tracts the immediate cause of the decreasing area under this crop has been, of late years, the highly unfavourable seasons, which have disheartened the cultivators, and led them to devote their attention to produce less remunerative, perhaps, in a good season, but less liable to failure when the rainfall is below the average in quantity or distribution. In 1891-92, for instance, in both Bihar and the Benares tract, first hail, then untimely rain, and lastly, the frequent accompaniment of such a season, a plague of caterpillars, had the result of reducing the out-turn very considerably. In the Bihar Agency, too, the reduction of the area by the order of the Government has to be taken into consideration. In the Benares districts, it is said, on the other hand, that a really good season would restore the popularity of the poppy amongst the agriculturists. Taking the two Agencies together, the number of cultivators engaged in this branch of cultivation is returned as 1,306,741. It is observable, however, that the poppy in very few, and quite exceptional cases, occupies any more than a small fraction of each man's holding, so that whilst it yields him a good profit in one year, its failure will not impoverish him in a bad. It is to be noted that the net cost of a chest of provision opium in the Bengal Agencies has risen from Rx. 28 in 1851-52, to Rx. 43½ in 1889-90, the last year dealt with in the general return, whilst the price paid per 2 lbs. weight, which was 3·5 rupees in the former year, was 5 rupees in the latter. The produce per acre, again, has been falling off of late years, as is to be seen in the approximately correct figures given in the margin, which, though for single years, are in general accordance with the similar return for the years on each side of them.

| Year. | Bihar. | Benares |
|---|---|---|
| | lbs. | lbs. |
| 1851–52 | 20 | 19 |
| 1861–62 | 14 | 17 |
| 1871–72 | 13 | 10 |
| 1881–82 | 13 | 17 |
| 1891–92 | 10 | 13 |

In the case of the Malwa article, the importations into Bombay during the year 1891–92 exceeded those of the preceding year by 769 chests, and were 30,848½ chests, as compared with 30,079½. The shipments to China, too, rose by more than 700 chests, and the rate fetched was in advance slightly of that ruling during the year 1890. In the Panjab, 10,418 acres are returned as under poppy in 1891–92, an increase of 11 per cent. over that of 1890–91.

China trade.

| Year. | Out-turn in Chests (133 lbs.) | Bengal Exports. | | Malwa Exports to China. | Imports into Hong Kong. | | | |
|---|---|---|---|---|---|---|---|---|
| | | China. | Total. | | Bengal. | Malwa. | Total Indian. | Persian. |
| 1871–72 | 46,655 | 37,175 | 44,192 | 42,810 | 33,412 | 40,372 | 73,784 | 576 |
| 1873–74 | 59,076 | 37,285 | 46,485 | 47,754 | 33,102 | 46,810 | 79,912 | 958 |
| 1875–76 | 72,325 | 36,401 | 46,535 | 48,905 | 35,730 | 47,919 | 83,649 | 1,654 |
| 1877–78 | 47,731 | 44,769 | 53,755 | 37,866 | 40,310 | 33,898 | 74,208 | 4,202 |
| 1879–80 | 57,508 | 46,147 | 55,980 | 35,251 | 43,290 | 34,192 | 77,482 | 4,662 |
| 1881–82 | 58,354 | 45,075 | 55,950 | 31,173 | 41,418 | 28,544 | 69,962 | 7,239 |
| 1883–84 | 68,348 | 38,451 | 49,012 | 39,960 | 33,194 | 40,505 | 73,699 | 4,384 |
| 1885–86 | 66,994 | 41,584 | 53,370 | 40,886 | 42,204 | 40,119 | 82,323 | 5,696 |
| 1887–88 | 73,231 | 43,288 | 57,113 | 31,488 | 35,969 | 30,199 | 66,168 | 4,820 |
| 1889–90 | 51,652 | 42,753 | 57,241 | 26,934 | 43,161 | 26,554 | 69,717 | 6,940 |
| 1891–92 | 39,899 | 34,924 | 50,370 | 30,008 | 36,675 | 30,639 | 67,314 | 6,619 |

In

In connection with this subject, it is of obvious importance to note the variation in the China demand, which, for our present purpose, may be taken to be that of Hong Kong, so far as imports are in question; and, in order to appreciate also the working of the Reserve system, the out-turn of Bengal opium in each year is also shown. For the last three years the imports into Hong Kong have decidedly diminished, especially in the case of the Malwa article. The fact that on two occasions of those quoted this product was shown to be imported to a greater extent than exported from India to this port, is probably accidental, and due to shipments from intermediate ports. As to the trade with the Treaty Ports, which is returned in piculs or chests, it appears from the returns that a falling off in the Northern and Yang-tse ports has been accompanied by a rise in that with Shanghai and the Southern. In both Hong Kong and the Southern Treaty ports the increase in the imports of the Persian article is remarkable. The average price realised per chest at Government sales in Bengal and in the Bombay market, given marginally, show a downward tendency for the last 20 years, though this feature has been more marked, as may be gathered from the accounts of the general conditions of the trade, within the last few years.

OPIUM.

| Year. | Bihar. | Benares. | Malwa. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| 1856 - - - | 93·3 | 96·3 | 108·2 |
| 1861–62 - - - | 148·0 | 141·4 | 159·3 |
| 1871–72 - - - | 143·2 | 138·9 | 134·7 |
| 1881–82 - - - | 126·0 | 122·0 | 143·3 |
| 1881–92 - - - | 121·6 | 119·6 | 119·0 |

The next point requiring mention here is the supply of opium for consumption within British India. The sale of this drug, and of preparations from it, is conducted by licensed vendors, under rules framed in accordance with the Opium Act of 1878. As regards the manufacture of Bengal opium for this purpose, the normal proportion appears to range about 8 per cent. on the amount set aside for export. Occasionally, however, of late years the proportion has risen, in order that the local reserve may not be unduly depleted in bad seasons. The supply of Malwa opium is not generally ascertainable except so far as purchases from the State reserve are concerned. But in many cases the vendors make their own arrangements for obtaining their stock direct from Central India, paying the pass-fee at the post of exit, so that the article does not appear as a separate item in the Bombay general accounts, but is recorded locally. The same remark applies to the stock required in Madras and Berar, whilst in the Panjab and Ajmer, the quantity locally grown seems to be nearly sufficient. The total quantity of the drug supplied from Malwa, therefore, is not recorded. In the principal Province drawing its opium supply from this source, that is, Bombay, the rate at which the drug was issued from the Government depôts was 10 rupees per lb. up to the end of the period under review, since which date it has been reduced to 9·75 rupees, as the market had fallen. The amount issued for consumption in British territory was 24,142 lbs., and a little more than this quantity was also issued to protected States under special agreement as to reduced rates or supply free of duty altogether. In addition to the amount thus issued, a considerable quantity is obtained, as has been above mentioned, direct from the scales, either by the Chiefs of the State in question, or by the licensed dealers in British districts. The marginal Table shows these amounts for the last three years, together with the average of the three years immediately preceding them. It appears that whilst the quantity consumed during 1891–92 increased, as compared with that shown against the preceding year, it was below that of the earlier periods. In all but the chief city and the Southern Division, where the consumption is insignificant, and Khandesh, where the current contract has still some years to run, the new system of establishing the minimum amount that the vendor agrees to sell is in force, so that this amount is now regulated by the Commissioner, and not left to competition. As regards the consumption of Bengal opium in British India, the following figures are taken from a Return published by the Government of India, with a Despatch on the subject that has been presented to Parliament.

Excise Opium.

| | Lbs. |
|---|---|
| Average, 1886–89 - | 147,232 |
| „ 1889–90 - | 160,849 |
| „ 1890–91 - | 136,259 |
| „ 1891–92 - | 140,638 |

Opium.

| YEAR. | Bengal Opium Issued (in Thousand Lbs.) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Total Manufactured for Excise. | Issued from Excise. | | | | | | |
| | | Bengal. | Assam. | North-West Provinces and Oudh. | Central Provinces. | Burma. | Panjab. | Total Issued. |
| 1881–82 | 569·6 | 134·0 | 137·0 | 99·8 | 79·2 | 74·2 | — | 524·0 |
| 1884–85 | 773·6 | 153·0 | 178·6 | 113·2 | 51·6 | 88·4 | — | 584·8 |
| 1887–88 | 482·2 | 151·6 | 116·0 | 125·2 | 45·8 | 98·2 | 16·0 | 553·8 |
| 1890–91 | 847·2 | 165·2 | 93·8 | 157·8 | 66·0 | 125·4 | 8·8 | 617·8 |

The number of retail shops at which opium and the preparations from it are licensed to be sold is given in the margin for the last year for which the information is available. In three Provinces, it will be noted, the licenses for opium and preparations from it are not distinguished, and in the Madras Presidency, it appears, the same license covers both classes of goods. The Burma return, including both divisions, shows a very small variation. The revenue derived from this source is credited to the head of Excise, but an extract showing it is entered below, in anticipation of the consideration of the latter subject in another section of this chapter.

| PROVINCE. | 1890–91. | | 1891–92. | |
|---|---|---|---|---|
| | Opium. | Preparations. | Opium. | Preparations. |
| Bengal | 1,700 | 390 | 1,698 | 374 |
| North-West Provinces and Oudh. | 1,160 | 48 | 1,140 | 26 |
| Panjab | 1,901 | — | 1,785 | — |
| Assam | 884 | 33 | 891 | 24 |
| Bombay | 1,166 | 119 | 1,163 | 103 |
| Madras | 1,050 | | 1,046 | |
| Central Provinces | 1,317 | | 1,161 | |
| Burma | 36 | | 37 | |

Receipts on account of Opium consumed in India.

| YEAR. | Madras. | Bombay. | Bengal. | North-West Provinces. | Oudh. | Panjab. | Central Provinces. | Assam. | India (General). | Burma | | Total Excise Opium. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Upper. | Lower. | |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1881–82 | 47,018 | 120,274 | 174,760 | 43,952 | 7,375 | 36,351 | 68,392 | 154,245 | 364 | – | 146,721 | 799,452 |
| 1882–83 | 51,406 | 83,425 | 179,592 | 45,601 | 7,901 | 38,523 | 71,535 | 163,964 | 608 | – | 150,005 | 792,560 |
| 1883–84 | 63,973 | 102,572 | 190,548 | 44,371 | 7,995 | 39,806 | 73,071 | 164,044 | 1,541 | – | 150,402 | 838,323 |
| 1884–85 | 66,524 | 100,267 | 188,393 | 43,822 | 7,767 | 37,433 | 73,251 | 168,262 | 2,713 | – | 146,442 | 834,874 |
| 1885–86 | 76,014 | 123,331 | 185,798 | 44,087 | 8,324 | 35,918 | 73,507 | 166,472 | 2,250 | – | 136,752 | 852,448 |
| 1886–87 | 67,632 | 119,784 | 190,575 | 44,208 | 8,645 | 36,722 | 72,414 | 166,594 | 2,581 | – | 164,067 | 873,222 |
| 1887–88 | 65,281 | 130,457 | 198,499 | 43,613 | 8,307 | 37,119 | 67,634 | 162,746 | 2,486 | – | 174,078 | 890,220 |
| 1888–89 | 68,387 | 138,130 | 200,813 | 47,764 | 10,170 | 38,183 | 69,019 | 163,560 | 2,927 | – | 189,089 | 928,042 |
| 1889–00 | 64,022 | 140,590 | 195,949 | 48,750 | 10,882 | 38,521 | 71,083 | 173,681 | 4,735 | 12,808 | 191,795 | 952,816 |
| 1890–91 | 71,814 | 127,781 | 199,631 | 47,692 | 9,999 | 41,298 | 71,334 | 180,385 | 5,558 | 13,207 | 200,853 | 969,452 |
| 1891–92 | 72,304 | 122,144 | 211,882 | 48,558 | 10,875 | 41,428 | 73,019 | 190,996 | 3,494 | 14,740 | 187,073 | 976,513 |

The increase is for the most part attributable to the greater efficiency of the preventive arrangements, by which the consumption of licit opium has been so largely substituted for that of the article smuggled into the Province from across the frontier. The whole question of the growth of the consumption of this drug in India was exhaustively treated in a Despatch of the Government of India in 1891, which, with the information on which the conclusions reached are based, was presented to Parliament in the following year. The main points on which stress is laid in this document were set forth in last year's issue of this Review, but owing to the importance attached to the subject they will

will bear reproduction here in a summarised form. First, the number of licensed opium shops diminished during the last 10 years in just the same proportion as that by which the population increased. The proportion of such shops to the population was, in 1889–90, about one to 22,000 people, and the shops for the smoking of the drug and preparations from it, one to 197,000. The consumption of opium rose only from 889,666lbs. in 1880 to 910,224lbs. in 1890. The local authorities in two provinces had ceased to issue licenses for opium to be consumed on the premises, and steps were in contemplation to restrict or abolish such licenses elsewhere. The consumption of this drug in the Madras Presidency, which had been uncontrolled in the past, had, since 1880, been brought under the same restrictions as in the rest of India. The duty on Excise opium again, had been raised in several provinces to an extent sufficient to restrict, in some degree, the amount consumed, or, at all events, to check the spread of the habit of indulging in the use of the drug. The Government of India also had it in contemplation to restrict, if possible, the consumption of opium amongst the Burman population of the Lower division of the province, as had been done in the Upper, though the possibility of enforcing upon a portion of the population a prohibition that did not extend to the rest, especially in a tract containing so large an admixture of foreigners, and one so adapted to successful smuggling as Lower Burma, was, it was thought, extremely doubtful. As regards the prohibition of the sale of the drug throughout India generally, which had been suggested, the Government of that country considered it neither feasible, so long as the poppy was cultivated either in British or Protected territory, nor advisable, owing to the deep root the habit has taken amongst the more martial races of the community of the north of India and other classes. Finally, it appeared from the returns that the annual consumption of licensed opium is equivalent to a dose of 45 grains a day for about 400,000 people; that is, to two in every thousand of the aggregate population. Opium.

The question, however, has been referred, since the publication of the above Despatch, to a Royal Commission. The terms of the reference may as well be given:—

"1. Whether the growth of the poppy and manufacture and sale of opium in British India should be prohibited except for medical purposes, and whether such prohibition could be extended to the Native States:

"2. The nature of the existing arrangements with the Native States in respect of the transit of opium through British territory, and on what terms, if any, those arrangements could be with justice terminated:

"3. The effect on the finances of India of the prohibition of the sale and export of opium, taking into consideration (a) the amount of compensation payable; (b) the cost of the necessary preventive measures; (c) the loss of revenue:

"4. Whether any change short of total prohibition should be made in the system at present followed for regulating and restricting the opium traffic and for raising a revenue therefrom:

"5. The consumption of opium by the different races and in the different districts of India and the effect of such consumption on the moral and physical condition of the people:

"6. The disposition of the people of India in regard to (a) the use of opium for non-medical purposes; (b) their willingness to bear in whole or in part the cost of prohibitive measures."

Evidence was taken in London during the autumn of 1893, and the Commission then adjourned, to meet again in India, where their inquiry is to be completed.

## EXCISE.

Such authorities on the former history of India as we have to guide us on questions connected with the social life of the masses appear to show that from very early days certain classes have been given to indulgence in intoxicating preparations of various sorts, the materials for which are naturally abundant throughout the country; but, as a whole, the population is an abstemious one, and the indulgence above mentioned is not, as a rule, excessive, even where it most prevails. The predecessors of the British Government, whether native or foreign, seem to have brought the practice under a certain degree of control, and to have derived revenue from it, though no organised system of administration was adopted. In their efforts to place the excise system on a footing which is free from objection, the Government of India have to encounter difficulties of a very serious and special character, greater perhaps than are met with in any other country which is ruled on principles in accord with modern civilization, and the complexity of the questions involved makes it hard for Excise.

Excise.

those who have no practical experience of the working of the administration to appreciate the obstacles which have to be surmounted.

In the first place, chiefly as regards spirits, the great variety of the geographical conditions, and of the raw material from which the preparations in question are made, with other local considerations, such as those of the class of people whose habits have to be thus brought under State regulation, the difficulty in some parts of communication, and, in others, that arising from the proximity of the territory of protected Chiefs, all preclude the adoption of a single uniform system of administration throughout the country, even though one may have been found by experience to be admirably suited to the greater portion of it. The facilities for smuggling or illicit distillation are so many that unless the system of State control be exactly in accordance with the requirements of the classes affected by it, its efficiency is vitiated, and the objects in view are not nearly attained.

In connection with this part of the subject it may be mentioned that the chief articles brought under excise regulation are, first, alcoholic liquor, which is chiefly manufactured from rice, molasses, the flower of the Mahua (*Bassia latifolia*), the sap of palm trees, and several other products, either local or widely spread; secondly, intoxicating or narcotic drugs, mainly opium or preparations from it and from hemp of three or four different sorts. Tobacco, which is largely, perhaps one may say universally, consumed, either in the way of smoking or as snuff, and in many parts of India and in Burma, by both sexes, is cultivated to some extent or other in nearly every village where it can be raised, and is subject to no State taxation or control, though in municipalities where town-duties are levied on imports, the soothing weed is generally found in the tariff. Tea is now produced to a considerable extent, as will be seen in the chapters dealing with agriculture and trade respectively, and is consumed by numbers of the Indian communities. Coffee, again, is largely drunk in towns by Musalmans as well as by foreigners. On these two there is no excise duty. Foreign wines, spirits, and beer pay import duties on entering India from 6 rupees per gallon in the case of spirits, to 0·0255 rupees in the case of malt liquors. This, however, is credited of course to customs, of which it forms no inconsiderable a proportion, and is, therefore, financially beyond the scope of the present subject. The general principles on which the regulation of the traffic in the above exciseable products is conducted have been thus summarised by the Government of India, and with the exception of the last, which was not authoritatively imposed, have been in force ever since the task was first taken in hand. They are the only ones which, in the opinion of that Government, it is expedient or even safe, to adopt:—

First, that the taxation of spirituous and intoxicating liquors and drugs should be high, and in some cases as high as it is possible to enforce;

Second, that the traffic in liquor and drugs should be conducted under suitable regulations for police purposes;

Third, that the number of places at which liquor or drugs can be purchased should be strictly limited with regard to the circumstances of each locality; and

Lastly, that efforts should be made to ascertain the existence of local public sentiment, and that a reasonable amount of deference should be paid to such opinion when ascertained. In regard to this last rule, it may be mentioned that the principle embodied in it had been considered as far back as 1874, but in place of issuing general orders with reference to it, it was found advisable to leave the application to the discretion of the local authorities, by whom the necessary rules most suited to each locality can best be ascertained and framed.

Administration.

As regards the general lines of the administration, it may be briefly mentioned that, as a rule, the right of dealing in the products chargeable with excise duty, or under excise regulation, within a defined tract or area, is disposed of for a certain term as a monopoly, or else a stillhead duty is levied on every gallon of liquor taken from the distillery, or, again, the right of distilling at specified places is licensed for a definite sum yearly, or lastly, a fee is charged on a license to sell specified classes of liquor. Generally speaking, the licenses to sell intoxicating drugs and fermented liquor, except beer brewed on the European method, are sold as yearly monopolies. Indian spirit is managed on a variety of systems, each more or less adapted to the local circumstances, because, as observed above, no one plan can be got to work throughout the country. Illicit distillation is in some parts of India far easier than in others. For instance, in Assam, where rice is the staple food of the country,

country, and the beer prepared from it is the drink of the labouring classes the process of manufacture is described as being as easy as "to brew a pot of tea." In the coast districts of Bombay, a pot of Tadi, or palm-juice, a small bowl, and a saucer wherewith to close the mouth of the aforesaid pot, will yield, in a couple of hours, and in expert hands, two or three quarts of strong spirit. In the tracts where the spirit is made from the Mahua flower, two pots, a bamboo, and some clay serve the same purpose. Amongst the classes that resort to the above simple methods of eluding the revenue officer the privacy of domestic life is probably but little to the fore, but in Bengal, apparently, according to the testimony of a native of that province, the innermost *penetralia* of the abode of the spirit-drinking classes are devoted to more systematic violations of the law, and the sympathy of the public is with the offender, so detection is not easy. The plan of administration which commends itself most strongly to the Government of India is that of levying a fixed duty on each gallon of spirit in proportion to alcoholic strength, and this is done most simply and efficiently when all the spirits for a definite tract are issued from a central public distillery, under a preventive establishment. But, unfortunately, where the quantity of liquor required is small, the cost of the establishment is prohibitive, and here and in other cases also, it is generally found that the small pay which alone can be provided for a staff of so great numerical strength, is inadequate to attract or to retain men of sufficient integrity to be entrusted with such responsible functions, so that much liquor passes out of the distillery which has never paid duty at all. Then, again, the difficulty of communication is sometimes excessive, so that the supply for outlying tracts or shops cannot be transmitted, and, in cases of long distances, hot weather, and certain classes of liquor, the latter will not bear the journey. Nevertheless, the tendency has always been towards the central distillery system, though it has to be occasionally backed with certain safeguards on the one hand and concessions on the other. The alternative system, that of outstills or farms, obviates most of the above-stated objections to the central system, but is accompanied by heavier drawbacks of its own, which are sufficiently obvious, and can only be counteracted by the maintenance of a large preventive force. On the whole, the fewest objections have been found to accompany the central system supplemented by what is known as the minimum guarantee, the latter to be fixed not by competition, but by the district officer, who can approximately determine what is the legitimate demand in his charge. If his approximation be a good one, the monopolist has no reason to supplement his licit sales. Of course, the difficulty of ascertaining the normal demand is great, but the results of the competition of past years furnishes a fair basis for future guidance. This system is now on its trial in the province where it was first adopted, and by the results there its efficacy will be decided, and the main features, so far as is possible, can be engrafted on to the practice of other parts of the country. Taking the country as a whole, the central system is in force almost throughout Bombay, the province in question just above, and in the Panjab, the North-west Provinces, Oudh, and Burma; in most of the more thickly peopled tracts of the Madras Presidency, and in some parts of Bengal and the Central Provinces. In the more sparsely populated parts of the last-named, in Assam, and in the rest of Bengal, the system is either that of farming, that is, of leasing the right of sale as a monopoly to the highest bidder, or of licensing the establishment of private stills, known as the Out-still system, one which is admittedly adapted to none but the wilder tracts, where smuggling and illicit distillation is easy, and where, if the supply of the required quality of liquor is not legally obtainable, resort will be had to the above demoralising practices. As regards liquors of foreign manufacture, the license to sell is usually granted at a fixed yearly rate for each shop, of which, outside the Presidency towns, there is no large number. There were in 1891, 22 breweries at work in British India, at which the registered out-turn was 4,745,800 gallons. For the first time the proportion purchased by the Commissariat fell to less than half. Ten years ago there were 17 establishments with an out-turn of 2,595,000 gallons, of which two-thirds was taken by the Commissariat. The capital invested in these concerns, which was estimated at Rx. 125,000 in 1882, is returned at Rx. 170,000 ten years later. The whole question of excise administration in India has been exhaustively dealt with during the decade in despatches that have been presented to Parliament at various dates, so it is not necessary to enter into further details on it in this review.

Excise.

EXCISE.
Excise revenue.

We may pass on, accordingly, to the revenue aspect of the question. The proportion borne by the gross revenue from excise to that from all sources has risen since 1882–83 from 5·1 per cent. to 5·76. Twenty years ago the proportion was only 4·1, whilst in 1862–63 it is returned as 4·3. The great rise, accordingly, has been within the last twenty years or so. In the last chapter, where the proportion is shown to the principal revenue heads in the aggregate, the excise receipts, in the gross, reached 6·39 per cent. in 1881–82, 8·03 in 1886–87, and 8·60 in 1891–92. The net figures indicate a slightly lower rate of increase as the charges rose from 3·4 to 4·3 per. cent. on the gross receipts, in consequence of the more extended arrangements required under the new systems to prevent frauds on the revenue. As compared with the net revenue of 1881–82, every subsequent year has shown an increase, as was mentioned on page 208, until the last year of the decade is, in this respect, 48 per cent. ahead of the first. The result is attributed in some degree to the increase in the population during the above period, especially since the census seems to indicate a rate of growth amongst the lower classes, which include, probably, most of the contributors, in excess of that which prevails amongst the upper and middle. Then, again, there has been a general increase in earnings amongst the same class, but no doubt the main cause of the increased revenue is the better administration, which has substituted licit liquor for that procured by other means, and, in part, to increased prices. The marginal table gives the net revenue from excise for the last 10 years, and in order to show the full revenue from this class of consumption, the customs duty on imported wines, spirits, and malt liquors is added in each year, after deducting drawbacks. Some of this, necessarily, falls upon the inhabitants of the protected States, but this portion cannot be large. Then, again, the rate of duty has been raised a few years back. Altogether, the incidence per head of population, which was 0·19 rupees in 1881–82, was 0 25 rupees, or something under sixpence, at the end of the period, a rise of 31 per cent., as compared with the general rise in revenue of 47. The following table gives the heads of excise revenue for the two first and the two last years dealt with in this review. The most noteworthy feature is the rise in still-head duty, in pursuance of the general policy of the Government.

| Year. | Net Revenue. |
|---|---|
| | *Rx.* |
| 1881–82 | 3,716,464 |
| 1882–83 | 4,030,089 |
| 1883–84 | 4,259,099 |
| 1884–85 | 4,414,934 |
| 1885–86 | 4,571,946 |
| 1886–87 | 4,864,764 |
| 1887–88 | 5,062,443 |
| 1888–89 | 5,253,630 |
| 1889–90 | 5,294,420 |
| 1890–91 | 5,373,699 |
| 1891–92 | 5,480,988 |

EXCISE REVENUE.

| HEAD. | 1881-82. | 1882-83. | 1890-91. | 1891-92. |
|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. |
| License fees, &c. | 1,532,877 | 1,621,963 | 2,340,481 | 2,063,358 |
| Distillery fees | 80,505 | 79,407 | 164,406 | 174,466 |
| Still-head duty | 816,353 | 886,772 | 1,136,463 | 1,536,744 |
| License fees for sale of hemp preparations and opium | 316,036 | 328,574 | 451,923 | 583,358 |
| *Total* | *2,745,776* | *2,916,716* | *4,093,273* | *4,357,926* |
| Duty on opium consumed in India | 661,902 | 669,589 | 792,562 | 736,945 |
| Acreage on poppy cultivation | 3,674 | 3,917 | 3,689 | 4,245 |
| Fines and miscellaneous | 15,922 | 19,339 | 58,256† | 18,148 |
| TOTAL EXCISE REVENUE | 3,427,274 | 3,609,561 | 4,947,780 | 5,117,264 |
| *Charges* | *96,886* | *134,213* | *174,981* | *190,097* |
| Net Revenue | 3,330,388* | 3,475,348 | 4,772,799* | 4,927,167* |

* Refunds and drawbacks are not deducted; hence these figures differ slightly from those in the general tables.
† Upper Burma revenue (Rx. 42,346) not distributed by its Sub-heads in 1890–91.

The

The next point for comment is the share of the above revenue contributed by each of the chief Provinces. The proceeds of the sales of opium for Indian consumption, as well as the fees or other payments for the monopoly of sale within the limits of each district or other defined area, have been separately shown above, but, for the purpose of comparison, are included in the general account of which an abstract is given in the margin. It appears that the highest rate of increase has been in the Madras Presidency, where the revenue has been steadily growing since 1882–83. Bombay and the Panjab come next, but in the latter the actual figure is small in comparison with that in other Provinces of like population, and the expansion has been more marked since 1885 86. As regards Lower Burma, the high relative increase, which exceeds that in the Panjab, has been accompanied by an abnormal growth of population, both indigenous and foreign, a fact which somewhat affects the comparison. The lowest rate of increase is found in Bengal, where it is 18 per cent. only. Taking the incidence of increase in the revenue per head, Madras still keeps in the van, and the Panjab supersedes Burma for the second place. The latter, again, is postponed to Bombay, though the actual growth of revenue per cent. has been higher in the more remote Province. The Western Presidency shows the highest actual incidence, excepting that in Burma, which was ahead of all the rest in both the years quoted. Assam comes high, too, whilst the three great Provinces of the Ganges and Upper Indus valleys present a remarkably low rate of charge. It is worth while to see how the different Provinces vary as to the distribution of this revenue between the several heads quoted in the general account reproduced in the preceding paragraph. The following statement, accordingly, is an expansion of the latter, and is extracted from the Financial and Revenue Accounts for the last year of the decade under review:—

EXCISE.

| PROVINCE. | Gross Revenue from Excise. | | | Incidence per Head. | | |
|---|---|---|---|---|---|---|
| | 1881–82. | 1891–92. | Percentage of Increase. | 1881–82. | 1891–92. | Percentage of Increase. |
| | Rx. | Rx. | | Rs. | Rs. | |
| Madras | 648,382 | 1,213,964 | + 87 | 0·21 | 0·34 | + 61 |
| Bombay | 660,260 | 1,025,462 | + 55 | 0·40 | 0·54 | + 35 |
| Bengal | 937,393 | 1,113,397 | + 18 | 0·14 | 0·15 | + 7 |
| North-West Provinces and Oudh | 414,712 | 524,303 | + 26 | 0·09 | 0·11 | + 22 |
| Panjab | 119,247 | 183,938 | + 54 | 0·06 | 0·09 | + 50 |
| Central Provinces | 204,456 | 277,419 | + 35 | 0·21 | 0·26 | + 23 |
| Assam | 189,266 | 260,330 | + 37 | 0·39 | 0·49 | + 25 |
| Lower Burma | 224,986 | 376,696 | + 67 | 0·60 | 0·80 | + 33 |

## Excise Accounts for 1891-92.

| HEAD. | Madras. | Bombay and Sindh. | Bengal. | North-West Provinces and Oudh. | Panjab. | Central Provinces. | Assam. | Burma. | | India, General. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Upper. | Lower. | |
| A.—Revenue: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1. License fees and contractors' rents | 664,624 | 56,683 | 580,794 | 143,807 | 57,397 | 42,842 | 38,379 | 20,850 | 150,966 | 14,905 |
| 2. Distillery fees | 173 | 34,094 | 5,548 | 88 | 354 | 116,723 | — | 2,016 | 1,930 | 13,540 |
| 3. Still-head duty | 300,023 | 663,139 | 175,266 | 224,705 | 58,989 | 15,504 | 1,228 | 10,456 | 36,651 | 50,783 |
| 4. License fees for sale of opium, &c. | 33,298 | 13,046 | 50,883 | 19,517 | 32,952 | 28,735 | 27,669 | 4,827 | 59,556 | 8,041 |
| 5. Ditto hemp drugs | 5,421 | 24,202 | 10,968 | 71,682 | 15,712 | 12,304 | 15,306 | — | — | 674 |
| 6 Rent of Toddy-Palms | 167,457 | 113,717 | 131 | 5,930 | — | 1,940 | — | 2 | 17 | 2,917 |
| 7. Duty on opium for Indian consumption | 38,965 | 111,511 | 167,467 | 57,704 | 13,527 | 45,979 | 162,987 | 9,914 | 127,517 | 1,374 |
| 8. Duty on Ganja (hemp) | — | 381 | 121,384 | — | — | 11,831 | 14,697 | — | — | 272 |
| 9. Acreage rate on poppy cultivation | — | — | — | — | 4,245 | — | — | — | — | — |
| 10. Fines, confiscations, &c. | 4,003 | 8,689 | 956 | 870 | 762 | 1,561 | 64 | 67 | 59 | 1,117 |
| Total Excise Revenue | 1,213,964 | 1,025,462 | 1,113,397 | 524,303 | 183,938 | 277,419 | 260,330 | 48,132 | 376,696 | 93,623 |
| B.—Charges: | | | | | | | | | | |
| Salaries and establishments | 33,230 | 25,436 | 45,292 | 6,494 | 4,524 | 3,576 | 358 | 1,333 | 2,962 | 1,690 |
| Contingent charges | 16,097 | 9,234 | 19,664 | 1,150 | 568 | 1,402 | 443 | 332 | 532 | 155 |
| Loss by opium sales, wastage, &c. | 17 | — | — | 6,556 | — | — | — | — | — | — |
| Rents, &c. | 81 | 204 | 921 | — | 6 | 61 | — | — | 2 | — |
| Petty construction and repair | 6,655 | 123 | 689 | — | — | 234 | — | — | — | — |
| Total Charges | 56,080 | 34,997 | 66,566 | 14,200 | 5,098 | 5,273 | 801 | 1,665 | 3,496 | 1,845 |
| Net Revenue | 1,157,884 | 990,465 | 1,046,831 | 510,103 | 178,840 | 272,146 | 259,529 | 46,467 | 373,200 | 91,778 |
| *Percentage of Charges on Gross Revenue* | *4·62* | *3·41* | *5·97* | *3·70* | *2·77* | *1·90* | *0·30* | *3·39* | *0·93* | *1·97* |

The difference in the systems in force in the various Provinces are reflected to some extent to the foregoing Return. For instance, the Still-head duty system is well established in Bombay and the small tracts directly under the Government of India, and is gaining ground in the North-West Provinces and the Panjab. In the Central Provinces, as has been marked above, the nature of a good deal of the country precludes the extension at present of that plan of levying duty, so the private distillery still flourishes. In Lower Burma and in Assam and the Central Provinces, and to a lesser extent in Bengal also, the importance of opium is well marked, whilst the consumption of preparations of hemp appears to be larger in Bengal, Assam, the North-West and Central Provinces than in the rest. In Burma there is no return under this head, and in the Southern Presidency a very small one. In regard to the question of charges on the administration of this branch of revenue, the last entries in the table show that of the larger Provinces, Bengal expends nearly 6 per cent. on Excise, whilst the Central Provinces manage with just under 2 per cent. Bombay and the North-West Provinces lie between, with 3·4 and 3·7 respectively, and Madras exceeds, and the Panjab falls below these rates. Of the less populous areas, Assam shows the lowest ratio, and Upper Burma, where the rules of issue are peculiar to that tract, stands at the top. Excise.

Space does not allow of the minute examination of the provincial administration of the year with which this decade closed, so the following brief comments are substituted for the more detailed accounts that have been given in the last few annual numbers of this review.

In Madras the palm-liquor, in some form or other, competes with that from molasses or other material, and the revenue per head derived from the excise on each is nearly the same. The number of shops for the provision of tadi, or palm-liquor, slightly increased, whilst that for the sale of "country spirits" fell off. There was, in the year under review, one shop of the former class to six square miles of country; of the latter, one to 10. The population round each spirit shop, assuming, of course, equal distribution, was 2,840, with 1,760 similarly within reach of every tadi-shop. The question of the reduction of the number of spirit shops is being dealt with under general rules prescribed by the local authorities. The excise system, or that of supply on payment of duty on quantity issued, was extended to some extent, and the out-still, or renting system is being gradually restricted to the tracts where communication during parts of the year is peculiarly difficult. As to the palm-liquor, the system of tree-taxation which is being extended rapidly, has proved a financial success, and in reviewing the working of the excise systems, as a whole, the local Government finds that an increase of revenue has been obtained with a decrease in the consumption of liquor, whilst the preventive measures were specially effective against the attempts to defraud the revenue in tracts where the new tree-tax had been but recently introduced. Madras.

The Western Presidency, like the Southern, derives a considerable portion of its excise revenue from palm-liquor, but there is a considerable difference between the different portions of the Province as regards the materials from which spirits are prepared, and in Sindh, the tadi is obtained only to a small extent and in the coast district. In the South-Deccan, again, the material, as in Sindh, is chiefly grain or molasses, whilst throughout the centre and northern coast districts, the flower of the Mahua is used in distillation. In connection with this product, recent legislation has been undertaken to prevent illicit distillation. The Presidency proper, that is, omitting Sindh, shows an increased revenue from a smaller consumption, and the number of licensed shops were reduced by 23. There are, on the whole, about 10,000 people per spirit license, and about half that number per Tadi-license. The number of palm-trees tapped fell off slightly, but the licenses issued for tapping for domestic consumption largely increased. The partial scarcity in the South-Deccan restricted the demand in that tract for both spirits and drugs, but the raising of the tree-tax in other parts of the country restored financial equilibrium. In Upper Sindh, the injury done to the crops during the season before last is said to have affected the purchasing power of the people so far as the luxury of spirits is concerned, but in the rest of that Province the revenue progressed in the same direction as in the older portion of the Presidency. Bombay.

In Bengal the Excise revenue is more varied as to its sources than in the two tracts mentioned above. Out of a total gross revenue of Rx. 1,112,980 (according Bengal.

Excise.

(according to the local return); Rx. 481,460 is derived from country spirit; Rx. 229,260, from Ganja; and Rx. 5,000 or thereabouts from other hemp preparations, with Rx. 211,880 from excise opium; Rx. 95,740 from Tadi; and Rx. 30,400 from rice-beer. Imported foreign liquor, too, account for some Rx. 45.000. The net revenue for 1891-92 showed an increase of some Rx. 65,000, in spite of a bad season, both as regards health and crops in portions of the Province. The outstill system still prevails in 1,770 shops, an increase of 48 over last year, whilst the excise or distillery system is in force in 1,149, a decrease of 154. The Tadi system is here based, as a rule, on the number of trees the liquor of which is to be sold at a particular shop, and the system of taxation per tree tapped is not yet in force. The number of trees in each defined area is not recorded, nor are the trees themselves marked and numbered. The Pachwai or rice-beer revenue increased considerably, both in amount and in the number of persons by whom it was paid, chiefly owing, it is stated, to the extension of the system of granting licenses for brewing for home consumption. The Ganja crop was a short one, so the price rose to over four times that of the preceding year, with the result of decreased consumption.

North-West Provinces.

The year in question was noteworthy in the North-West Provinces as being the last in which the former system is to prevail of levying a fixed still-head duty on spirits irrespective of strength, two duties, according to strength, being now substituted for the previous single rate. Then, again, in pursuance of the policy of the local Government of concentrating the issues of spirit, nine distilleries have been reduced, and more of those now existing will not be re-licensed for the following year. The outstill system is now, after exhaustive local investigation, restricted to those tracts where the proximity of Protected States renders this plan the only one effective against illicit distillation and smuggling along the frontier. Owing partly to the changes in the system of charging still-head duty, the revenue shows a considerable decrease as compared with that of the year before; but it is clearly shown that this result is also due in great measure to the bad agricultural season, which led to decreased demand not only of the liquor issued from the central distilleries, but in that from all other sources, as well as under the head of drugs. Nevertheless, the returns show a steady fall in the consumption of country spirits for the last five years, whilst the upward tendency of the consumption of opium and hemp drugs, though it has received a check during the year under mention, has been remarkable. In the case of the former it is probable that as the check has taken place in tracts where the poppy is allowed to be cultivated, it is due to increased use of illicitly-obtained opium. As to the latter, it is noticed that the statistics distinctly indicate that the revenue from it is flourishing at the expense of that from spirits, and the temperance or abstention movement, which is said to be making way in some of the larger towns, is confined to the latter form of indulgence, thus possibly leading indirectly to an extended use of hemp drugs.

Panjab.

In the Panjab one-half the Excise is on spirits, and nearly the same proportion was received from the five districts of Ambala, Lahore, Firozpur, Amritsar, and Rawal Pindi. The indulgence in this form of luxury, accordingly, is purely local, and in or round the larger manufacturing towns and garrisons of the East, with the important exception of Delhi. The rate of consumption of spirits is stated by the local Government to be one pint per month to 165 persons, and the increase of revenue is due almost entirely to successful prevention of illicit distillation in the tracts where the practice of drinking is more prevalent than elsewhere amongst special classes. The number of distilleries is now 29, a decrease of 46 during the last five years. The great decrease in the number of licenses for retail sale which is noticeable in the return is due chiefly to the withdrawal of temporary licenses at fairs. The consumption of hemp drugs, especially of the Charas imported from beyond the northern frontier, is said to be considerably in excess of the quantity returned in the records of the licensed vendors, leading to the presumption that there is a good deal of this powerful intoxicant sold through other than the legal channels.

Central Provinces.

The Excise revenue of the Central Provinces has been steadily rising since 1887, in spite of the diminishing number of stills, outstills, and shops, which, in the year 1891-92, amounted to a decrease of 4,134 and 260 respectively. The increased revenue from spirits is found in the sums bid for monopolies, not in the still-head duty receipts. This is attributed to several causes; among others,

to

to keener competition, to the substitution of triennial for annual leases, and, finally, to the presence of large bodies of railway labourers. In the parts of the Province where the revenue from this source fell off, the causes assigned are partly a bad season in the Narbada Valley, combined with a too extensive and hasty reduction of the number of shops in tracts where the facilities for illicit distillation are particularly prominent. The number of shops for the sale of opium and preparations from it fell off, in the first case, from 1,032 to 994, and, in the other, from 285 to 167. Here, again, in the districts bordering on the poppy-growing tracts of Malwa, it is a matter still under the consideration of the Chief Commissioner whether further reduction would not result in increased smuggling. The remarks on the apparent tendency to increased consumption of Ganja are in the same tone as those mentioned above as indicating the apprehensions of the North-West Province Government lest this cheaper but more deleterious drug should not be taking the place of opium or spirits. The information, however, regarding this point is not yet sufficient to justify a conclusion one way or the other. Excise.

The form of license in Assam was changed during the year in question both for fermented liquor and for opium preparations. In the former fuller accounts were prescribed, whilst in the case of the latter the consumption on licensed premises of special preparations, such as Chandu, Madak, &c., was prohibited, and the possession of more than a reduced minimum quantity of those drugs made penal. The main items of revenue are, as was observed in treating of the general subject above, opium and ganja. Both of these showed an increase, more marked, however, under the former than the latter. It is noteworthy that the Assam Valley, which contains less than half the population of the Province, yields nearly 82½ per cent. of the Excise revenue, whilst the densely-peopled Surma Valley accounts for no more than 16½. There was a temporary closure of eleven spirit shops and five for the sale of ganja, owing, in the former case, to the failure to realise the upset price. A notable decrease in the number of opium shops was prescribed, but did not come into effect until the beginning of the year following that with which this review is now concerned. It may be mentioned, however, that in eight years the opium shops have been reduced from 1,318 to 891, with all due consideration for the legitimate demands for the drug in this Province. The demand is to a great extent localised, as two districts in the Brahmaputra Valley alone contribute about Rx. 100,000 out of the Rx. 190,000 of the Province. Assam.

The only other Province which need be specially noticed in connection with the present subject is Burma. In the Lower Division of that Province the matter of the greatest importance in Excise matters was the prohibition of the sale of other than raw or refined opium, thus putting a stop to the provision of adulterated preparations of opium and betel-leaf and of refuse of other sorts. In consequence, too, of the abuse by licensed vendors of their privilege of purchase of the drug without limit as to quantity, it has been determined to limit the sale to farmers, the quantity issued to whom is to be regulated by the number of consumers estimated by the local officials to reside within the limits of the farm. As to liquor, one of the three licensed distilleries ceased to work at the end of the year, owing to its inability to compete with the imported article. It is also stated that Madras spirits are driving the locally-made article out of the market in Lower Burma. The number of outstills has been reduced by four, and it is thought that no further reduction to a great extent can be effected without encouraging illicit distillation in the remote tracts. The number of such stills discovered during the year was no less than 226. The consumption of Rice-beer and Tadi both increased along the coast, and it is thought that the former is gradually growing in popular favour to the exclusion of spirits, a change which would be viewed favourably by the local authorities, as it is supposed to be far less deleterious to health. As to Upper Burma, the license sales for the provision of retail opium fell off very considerably, owing, it is said, to the combination of the Chinese dealers to refuse to maintain rates, and partly to the speculative bids of previous years. On the other hand, the receipts from sales of licit opium were more than doubled. This is attributed to the fear on the part of dealers to detection in their former habit of smuggling what they wanted, and partly also to the abnormal sales in the districts bordering on the Lower Division of the Province, along the line of rail, from whence, it is suspected, the excess over the local demand is conveyed into the latter. The income from licenses Burma.

EXCISE.

and duties on liquor was largely in excess of that of 1890-91, and it is reported to be not improbable that Mandalay beer will hold its own against imported spirits. There are now three distilleries in Upper Burma, and outstills, of which there are eleven, are confined to the remote districts. No less than 70 illicit establishments of this sort, however, were broken up during the year in question.

In consideration of the length to which the account of this important subject has already run, it is inadvisable to enter into the details of the smaller Provinces, but to pass at once to the next head of revenue.

## CUSTOMS.

CUSTOMS.

The revenue from Customs Duties is not a matter on which there is any necessity to dwell at length, since these duties were restricted in 1882, as mentioned in the preceding chapter, to a few special articles, and the changes that have since taken place in the other direction are comparatively unimportant.

The rates fixed in 1875 on arms, ammunition, and military stores were retained in 1882. That on liqueurs, which was also left at Rs. 4, was raised in 1887 to Rs. 5, and again in 1890 to Rs. 6, which is the general rate on spirits at present, excepting those described as perfumed, which are charged at the rate of Rs. 8. The rate on wines, which is generally R. 1 per gallon, is Rs. 2/5 on sparkling wines. Opium not covered by the Government pass pays Rs. 24 per "ser" of about 2 lbs. In 1888 a small duty of R. 0·031 per gallon was placed upon petroleum and other substances of a like nature specially included in the notification. The duty on salt imported into Burma was raised from R. 0·1875 to R. 1 in 1888, and at other ports from Rs. 2 to Rs. 2/5. Duty on exports is now retained in the case of rice only, on which product it falls at the rate of R. 0·1875 per "maund" of 82⅔ lbs.

The revenue from Customs Duty has shown, with the exception of one year's transactions, an upward tendency during the decade. The following table gives the gross receipts for the first and the last three years of that period. It must be remembered that the duty on salt, though collected with the rest, is brought to account under the head of Salt Revenue. In four of the six years, too, it may be noted that the rice duties on exports of that commodity exceed in amount those from the whole of the dutiable imports.

Gross Collections on Account of Customs Duty.

| HEAD. | 1881–82. | 1882–83. | 1883–84. | 1889–90. | 1890–91. | 1891–92. |
|---|---|---|---|---|---|---|
| A.—IMPORT DUTY: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Arms and Ammunition | 9,900 | 10,874 | 14,700 | 23,867 | 28,047 | 31,730 |
| Fermented Liquor | 7,518 | 7,441 | 8,065 | 17,658 | 17,505 | 18,864 |
| Spirits | 337,497 | 353,624 | 355,210 | 492,371 | 533,385 | 518,838 |
| Liqueurs and Wines | 59,481 | 56,543 | 56,884 | 49,237 | 50,010 | 51,884 |
| Petroleum | - | - | - | 162,392 | 165,040 | 174,662 |
| Salt | 2,392,478 | 1,764,854 | 1,750,647 | 2,379,310 | 2,449,084 | 2,531,738 |
| Opium | 31 | 280 | 209 | 285 | 325 | 349 |
| TOTAL GROSS DUTY, including other items | 3,947,715 | 2,195,959 | 2,187,407 | 3,125,253 | 3,243,535 | 3,328,197 |
| TOTAL GROSS DUTY, excluding Salt | 1,555,237 | 431,105 | 436,760 | 745,943 | 794,451 | 796,459 |
| B.—EXPORT DUTY: | | | | | | |
| Rice in husk | 11,516 | 7,166 | 8,153 | 9,136 | 13,868 | 12,267 |
| Rice not in husk | 750,752 | 824,828 | 710,723 | 709,146 | 907,171 | 866,946 |
| TOTAL EXPORT DUTY | 762,555 | 832,312 | 719,068 | 718,282 | 921,039 | 879,213 |
| TOTAL NET CUSTOMS REVENUE | 2,093,053 | 1,088,746 | 1,016,758 | 1,323,210 | 1,562,388 | 1,517,948 |

Comment

Comment on this return in detail appertains rather to the account of the trade of India, but the gradual increase of the revenue, excluding that from the duty on salt, is worth note in connection with the increased rate of duty on spirits and the new tax on petroleum. The export duty on rice depends, practically, on the transactions in Burma. This will be seen from the marginal table, in which the values of the chief dutiable articles imported and exported respectively during 1891–92 are given. Bengal is the only Province which competes with Burma in this respect. Bengal, too, takes the lion's share of the petroleum and the salt, leaving to Bombay that of the liquor and ammunition, arms, &c. Of the last a considerable portion belongs to the Government, and is transmitted from Bombay or Karachi to the North-West. The last point to mention is the remarkably small proportion that the dutiable trade bears to the total of either imports or exports. Customs.

VALUE OF DUTIABLE ARTICLES Imported and Exported during 1891–92.

| Article. | Bombay and Sindh. | Bengal. | Madras. | Burma. | TOTAL. |
|---|---|---|---|---|---|
| A.—IMPORTS: | Rx. | Rx. | Rx. | Rx. | Rx. |
| Arms, &c. | 439,534 | 134,892 | 129,783 | 4,324 | 708,533 |
| Liquors | 580,305 | 457,688 | 175,015 | 236,403 | 1,449,411 |
| Petroleum | 711,873 | 1,377,454 | 173,498 | 105,315 | 2,368,140 |
| Salt | 3,033 | 509,839 | 714 | 114,367 | 627,953 |
| TOTAL IMPORTS OF MERCHANDISE | 31,092,324 | 26,248,320 | 6,510,460 | 5,581,279 | 69,432,383 |
| B.—EXPORTS: | | | | | |
| Rice Exports | 359,980 | 3,801,258 | 442,956 | 8,692,598 | 13,296,792 |
| TOTAL EXPORTS OF MERCHANDISE | 48,078,355 | 39,967,733 | 10,044,946 | 10,082,558 | 108,173,592 |

## STAMPS.

Revenue coming under this head began to appear in the Indian accounts at the end of last century, when, however, it amounted to no more than Rx. 2,000. Sixty years afterwards it had risen to Rx. 684,000. A change in the law produced within two years from that date a revenue of Rx. 1,577,000. At the end of the period with which we are now dealing the gross receipts were Rx. 4,215,000. The marginal table shows the ratio borne by this branch of revenue to the total, at different periods of Indian finance. Speaking generally, stamp revenue is derived from two sources, litigation and commercial transactions, and is levied by the sale of stamps, adhesive or impressed. These last are manufactured in England, and the impressed paper of the higher values, it may be observed, is characterised by considerable artistic merit. It is not to be assumed that the whole of the cost of litigation or of ensuring the official recognition of documents is to be found under this head. In the case of the former many fees are levied in cash, whilst since 1879, the fees for registration have been credited, as has been already stated, under a special head. But of the revenue under stamps nearly 70 per cent. is derived under the authority of the Court Fees Act of 1870, and the rest under that of the General Stamp Act of 1879. As far as the mass of the population is concerned in the question, it has been said that the fluctuations afford a good indication of the prosperity of the year, since the stamp revenue from litigation varies directly, and that from obligations inversely, as the harvest. That is, in a favourable year the creditor sues for the loan that he has advanced in the stress of a bad one. But the general returns do not show this plainly, except where the failure of crops amounts to famine or scarcity over a relatively large area. In the first place, though there is no such event known to Indian history as a general failure, every year sees local deficiencies in the agricultural outturn the financial effects of which are obliterated in the general circumstances of the Province. Then, again, the domestic or social economy of the cultivating classes, as far as we are acquainted with it, by no means excludes the supposition that a good harvest does not tend to the increase of debt nearly as much as to its liquidation; or that in a bad year the creditor is not inclined to confirm his rights against his debtor by means which are intended for future, if not immediate use. At all events, the return of so large an area as that of a Province cannot be relied on for this purpose, save in such cases as that of Madras or Bombay in 1876–78. Stamps.

| Year. | Percentage. |
|---|---|
| 1842–43 | 1·8 |
| 1852–53 | 1·6 |
| 1862–63 | 3·5 |
| 1872–73 | 4·5 |
| 1882–83 | 4·5 |
| 1892–93 | 4·8 |

STAMPS

The place occupied by the Stamp revenue in the fiscal system has been shown above; the following table gives the details of the receipts and charges for five years of the decade under review. Two of these come at the beginning, two at the end, and one in the middle. The first mentioned show almost identical gross revenue, and the last are nearer together than the extremes from the mean year. Charges have necessarily increased, as the two largest items vary according to the sales.

STAMP REVENUE AND EXPENDITURE.

| HEAD. | 1881-82. | 1882-83. | 1886-87. | 1890-91. | 1891-92. |
|---|---|---|---|---|---|
| A.—REVENUE: | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1. Sale of Court Fee Stamps | 2,301,511 | 2,300,570 | 2,591,241 | 2,715,590 | 2,887,774 |
| 2. Sale of General Stamps | 1,019,891 | 1,019,233 | 1,090,338 | 1,251,100 | 1,297,281 |
| 3. Fines and Penalties | 13,188 | 14,128 | 12,295 | 11,861 | 13,497 |
| 4. Miscellaneous Receipts | 46,782 | 45,750 | 57,406 | 90,418* | 63,604 |
| Deduct Refunds | —37,707 | —36,633 | —45,494 | —46,101 | —47,198 |
| TOTAL REVENUE | 3,343,665 | 3,343,048 | 3,705,786 | 4,022,868 | 4,214,958 |
| B.—CHARGES FOR COLLECTION: | | | | | |
| 1. Salaries of Superintending Officers, &c. | 6,599 | 6,757 | 6,317 | 4,444 | 4,985 |
| 2. Establishments of Superintending Officers, &c. | 9,073 | 9,255 | 9,540 | 7,352 | 7,470 |
| 3. Contingent Expenses | 3,109 | 3,504 | 4,076 | 2,865 | 3,303 |
| 4. Charges for Sale of Stamps: | | | | | |
| (*a*) Clerks, &c. | 4,085 | 3,945 | 3,333 | 2,811 | 2,859 |
| (*b*) Commission to Vendors | 7,426 | 7,576 | 5,470 | 857 | 711 |
| (*c*) Discount on Sales of Court Fee Stamps | 23,291 | 23,195 | 26,121 | 24,532 | 26,312 |
| (*d*) Discount on Sales of General Stamps | 22,296 | 22,302 | 28,231 | 37,074 | 39,121 |
| (*e*) Contingent, &c. | 1,882 | 1,969 | 2,532 | 4,685* | 4,770 |
| TOTAL CHARGES IN INDIA | 77,761 | 78,503 | 85,620 | 84,620 | 89,531 |
| 5. Charges in England and Exchange thereon | 32,862 | 44,895 | 61,194 | 45,399 | 48,916 |
| TOTAL CHARGES | 110,623 | 123,398 | 146,814 | 130,019 | 138,447 |

* Including items for Upper Burma in 1886–87 and 1890–91.

The figures require no further comment, but it is interesting to note the degree in which the various Provinces contribute to the total revenue, and with this in view it is better to take the net returns than the gross. The following table, therefore, which is based on the details given in the third volume of the Financial and Revenue accounts, shows that of the Provinces named, Bombay and Bengal contribute considerably more than in proportion to their population, and that the North-West Provinces similarly contribute less in about the same degree as Bombay exceeds its proportion. The same on a smaller scale may be said of Assam and Lower Burma, whilst Madras, the Panjab and the Central Provinces are more in equilibrium.

## Net Stamp Revenue, by Provinces.



| Year. | Madras. | Bombay. | Bengal. | North-West Provinces and Oudh. | Panjab. | Central Province. | Assam. | Burma. | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Lower. | Upper. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1881–82 - - - | 514,950 | 396,289 | 1,148,482 | 567,075 | 324,260 | 119,017 | 63,024 | 79,645 | — |
| 1882–83 - - - | 496,544 | 406,051 | 1,174,580 | 570,909 | 313,960 | 119,701 | 69,712 | 80,559 | — |
| 1883–84 - - - | 536,913 | 410,574 | 1,205,620 | 589,386 | 330,249 | 128,402 | 72,181 | 87,186 | — |
| 1884–85 - - - | 535,033 | 430,975 | 1,245,678 | 592,004 | 328,361 | 133,871 | 74,390 | 95,244 | — |
| 1885–86 - - - | 560,874 | 426,656 | 1,270,935 | 606,411 | 323,174 | 133,452 | 76,218 | 91,215 | — |
| 1886–87 - - - | 542,994 | 459,688 | 1,292,318 | 622,742 | 340,093 | 143,975 | 72,279 | 85,654 | — |
| 1887–88 - - - | 566,142 | 469,890 | 1,327,307 | 644,711 | 360,369 | 148,611 | 76,701 | 86,320 | — |
| 1888–89 - - - | 576,686 | 481,283 | 1,329,427 | 646,164 | 376,460 | 152,313 | 70,815 | 88,044 | — |
| 1889–90 - - - | 615,563 | 502,061 | 1,366,955 | 678,568 | 376,444 | 155,304 | 78,401 | 95,680 | 19,366 |
| 1890–91 - - - | 614,700 | 515,452 | 1,375,077 | 658,054 | 375,293 | 146,708 | 74,818 | 97,232 | 22,827 |
| 1891–92 - - - | 642,207 | 523,581 | 1,458,618 | 678,043 | 392,980 | 164,131 | 79,976 | 103,954 | 23,669 |

The next point to be noticed is the relative amount contributed by the Court Fee and the General Stamps respectively. The marginal table shows this. The tendency during the decade has been for the ratio of the former to fall, or, at least, to remain stationary, but in the North-West and Central Provinces and in Assam it has risen. The fall has been marked in the Panjab and Lower Burma, though the actual revenue under both heads in those provinces has risen. The last two columns of the table will show the relative increase of the two sections.

| PROVINCE. | Per-centage of Court Fee Sales on Total Gross Revenue. | | | Per-centage of Increase in 1891–92 over 1881–82. | |
|---|---|---|---|---|---|
| | 1881–82. | 1886–87. | 1891–92. | Court Fee Stamps. | General Stamps. |
| Madras - - - | 62·4 | 62·3 | 61·7 | 22·7 | 24·0 |
| Bombay - - - | 55·7 | 56·5 | 55·7 | 30·9 | 31·1 |
| Bengal - - - | 72·4 | 74·2 | 72·5 | 25·8 | 25·6 |
| North-West Provinces | 73·1 | 75·9 | 75·0 | 22·3 | 19·2 |
| Panjab - - - | 69·8 | 66·9 | 64·9 | 12·2 | 20·6 |
| Central Provinces - | 68·2 | 70·7 | 71·9 | 47·3 | 39·8 |
| Assam - - - | 70·1 | 72·7 | 72·0 | 30.3 | 26·9 |
| Lower Burma - - | 67·0 | 63·7 | 58·9 | 15·1 | 31·1 |
| Upper Burma - - | – | – | 70·6 | — | — |
| Total - - - | 68·1 | 69·1 | 67·7 | 25·6 | 26·0 |

In Lower Burma, for instance, whilst the Court Fee stamp revenue has increased by 15 per cent., that from General Stamp transactions has expanded in double that proportion. In the Panjab, again, the difference is between 12 and 20 per cent. The reverse is seen to be the case in the Central Provinces and Assam, and, to a less extent, in the North-West Provinces also. In the important Province of Bengal the two have advanced *pari passu*, as in Bombay, but in the latter, the proportion of the Court Fee revenue to the total is markedly different from that found anywhere else in India, and averages less than 56 per cent. of the total, against nearly 70 in most other provinces. As regards the growth of the revenue, irrespective of the class of stamp yielding it, the Central Provinces and Bombay head the list, with Assam next them. Bengal represents about the average rate, and the Panjab lags behind. The figures on which the above comparisons are based are those given in the General Finance and Revenue Accounts, Part I. In the following table the two classes of Stamps are distinguished by Provinces, as they are in the more detailed statements to be found in the third part of the above publication.

STAMPS.

## GROSS RECEIPTS according to Class of Stamp.

| Year. | Madras. | Bombay. | Bengal. | North-West Provinces. | Panjab. | Central Provinces. | Assam. | Lower Burma. |
|---|---|---|---|---|---|---|---|---|
| A. COURT FEES: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1881-82 | 339,671 | 232,823 | 854,844 | 425,344 | 233,861 | 82,618 | 44,378 | 55,079 |
| 1883-84 | 362,565 | 232,913 | 919,381 | 452,079 | 237,415 | 88,760 | 54,088 | 57,208 |
| 1885-86 | 367,179 | 245,139 | 968,278 | 471,137 | 227,294 | 94,712 | 55,932 | 60,562 |
| 1887-88 | 371,089 | 269,630 | 1,026,478 | 495,480 | 242,317 | 108,237 | 60,199 | 55,586 |
| 1889-90 | 402,656 | 284,257 | 1,034,883 | 523,237 | 257,522 | 115,521 | 59,014 | * |
| 1891-92 | 416,562 | 304,321 | 1,095,062 | 520,323 | 265,090 | 121,888 | 59,099 | 63,436 |
| B. GENERAL STAMPS, &c.: | | | | | | | | |
| 1881-82 | 204,275 | 183,787 | 347,548 | 156,391 | 101,748 | 39,236 | 20,297 | 27,074 |
| 1883-84 | 199,921 | 194,653 | 338,310 | 148,499 | 103,626 | 42,332 | 20,677 | 32,182 |
| 1885-86 | 222,641 | 198,693 | 367,528 | 150,594 | 107,011 | 42,345 | 22,340 | 33,194 |
| 1887-88 | 236,088 | 219,475 | 355,125 | 163,436 | 130,582 | 45,149 | 18,483 | 33,268 |
| 1889-90 | 247,446 | 239,244 | 388,895 | 170,951 | 133,091 | 45,156 | 21,289 | * |
| 1891-92 | 258,307 | 241,200 | 414,984 | 173,209 | 142,581 | 47,614 | 22,983 | 42,867 |

* The Upper Burma Return is not given in separate detail.

## SALT.

SALT.

In treating of the incidence of taxation in the preceding chapter, the opportunity was taken of pointing out that in the simple conditions of tropical and sub-tropical life that prevail in India, it is only through one of the most urgent necessities of life that a great portion of the population can contribute in the least degree towards the cost of their administration. From at least the days of the Alexandrian expedition into the country it has been the policy of the rulers to derive a portion of the public resources from the taxation of salt, a commodity which is procurable in greater or less abundance in nearly every part of India. The quality, however, of the manufactured article varies, and the great distance to be traversed by rail in some cases between the source of supply and the place of consumption has prevented the universal spread of the best that is otherwise available. It is a curious testimonial, therefore, to the rise in the standard of taste and living that in the present day a large and populous tract in the east of India can be, and is, supplied with salt imported from Cheshire and Germany, the competition of which has driven from the market the inferior and unwholesome article which in former generations was all that could be obtained.

| Percentage of Salt Revenue on Total. | |
|---|---|
| 1842-43 | 11·9 |
| 1852-53 | 11·1 |
| 1862-63 | 10·1 |
| 1872-73 | 10·9 |
| 1882-83 | 8·8 |
| 1892-93 | 9·6 |

Variety of Salt Supply.

The Indian salt supply, apart from that brought from across the sea, is classed under four heads. First, that from the sea; secondly, the rock-salt of the north-west Panjab; thirdly, marsh; and, lastly, earth salts. Originally, no doubt, the sea is to be credited with all four, but it is superfluous to trace back the supply to its geological source. For the purposes of this review it is sufficient to mention that in the Panjab there are two main systems of rock-salt, the silurian, of the Cis-Indus Range, and the nummulitic, or perhaps eocene, beds across that river, in Kohat, with the detached beds in the Kangra Valley, within the small hill-state of Mandi. The supply is practically unlimited. Passing to the south and south-east, we come, first, to the great Sambhar Lake in Rajputana, with a relatively small supply from brine-wells in the Gurgaon and Rohtak districts of the Panjab and similar sources in the west of Rajputana, in the Didwana marsh and the Luni valley, and in the far larger supply of the same sort of salt from Kharaghoda in the Bombay Presidency, which belongs to the same system. Earth salt also is made in small quantities in parts of the States of Patiala under the Panjab and in Gwalior and Datia, in Central India. We may pass by the efflorescent products of the North-West Provinces, known as reh, khariar, &c., and the similar material used in the manfacture of saltpetre in both the north-west of India and in Bihar, though a small quantity of edible salt is thereby obtained as a bye-product.

product. There is, then, the sea-salt, which is manufactured by embankment and subsequent crystallisation, along the Orissa and east coast of Madras, and on the northern Bombay coast. In Burma, too, the littoral districts produce a small supply, mainly from brine-wells, and the same may be said of Upper Burma, but since the equalisation of duties on imported and home-manufactured salt in this Province, the former is apparently getting hold of the market, owing to its superior quality. In most instances, finally, in British territory, the manufacture of an inferior class of salt by boiling down impregnated earth has been forbidden, partly on account of the difficulty of its control, as saline earth is found in small quantities in nearly every part of India, but mainly because an unwholesome article was keeping from the consumer a supply of better quality, since it was to the advantage of the local dealers to push the sales of the article out of which they get most profit. The whole tendency of the State policy with regard to this all-important article of diet has been to secure as wide and equal a diffusion as possible of the best quality at the lowest rate. It has been mentioned in the above introductory paragraph that nearly the whole of Central India and part of the Panjab and North-West Provinces draw their salt supply from sources within the territory of protected Chiefs, so that before the initiation of the new system, of taxing the salt at the place of production, could be carried out thoroughly, arrangements had to be made with those Chiefs, under which the control of their salt works was placed in the hands of the British authorities, and cash rents or compensation, together with an agreement as to an adequate local supply of the article thus manufactured, had to be settled. In 1879 the inland customs line, an impenetrable barrier of mounds, ditches, and thorny shrubs, which stretched from Attock, on the Indus, to the bank of the Mahanadi, on the north border of the Madras Presidency, was abolished after an existence of 36 years, and with it went the force of 14,000 men required to patrol it, costing about Rx. 160,000 a year. This was the result of a combination of the above-mentioned agreements with the Chiefs and the equalisation of the salt duties between Northern and Southern India. In the same way arrangements by conventions were made with the French and Portuguese Governments, regarding their possessions in India. The last-mentioned power, however, concluded a treaty on more comprehensive lines under which the question of salt was dealt with on a different system, and the payments on this account do not appear under the same head as the rest in the general accounts. The total amount payable to the rest was Rx. 311,000 in 1881–82, Rx. 345,046 in 1890–91, and Rx. 351,500 in the last year of the decade. The increase is due chiefly to additional payments to Jodhpur, and to variation in the royalty paid on the Sambhar Lake out-turn, together with numerous small additions to the payments to Chiefs not included in the former agreements.

Salt.

Salt from Protected States.

The rate of duty, which was fixed at 2 rupees per maund of 82$\frac{2}{7}$ lbs. in 1882, except as regards the Kohat and Burma salt, was raised, under the same restriction, to 2·5 rupees in 1888. In the case of Kohat, the rate is only 0·5 rupees per local weight of 102 lbs., and the Mandi salt, again, pays less than the general rate. The mines are worked by the Chief's agents, and two-thirds of the duty he charges on salt exported to British territory is credited to the British Government. It appears that nearly two-thirds of the salt produced from these mines is found to make its way into the adjacent districts. A small quantity of Thibetan salt, too, it may be observed, comes across the Himalayan passes into Northern India, but so little, that only the fact of its importation need be mentioned here. The rate of duty in Burma was only 0·187 rupees per maund till the beginning of 1888, when it was raised to one rupee. In reviewing the results of the rise in the duty-rate, the financial member of the Governor General's Council stated that the first effect was to raise the retail price of salt by 0·047 rupees in excess of the rise in duty. He added that, assuming the high average consumption of 10 lbs. per head, man, woman, and child, and five persons per family, the salt of that household would cost annually 2·422 rupees instead of 2 rupees. This calculation, however, was admittedly only approximately correct, and the actual incidence which is affected by diet, social customs, and so on, varies much. In Northern India, for instance, probably less salt is required, as the diet of the masses largely consists of pulse and other nitrogenous food, and the forage of cattle again is a good deal impregnated

Rates of Duty and Consumption.

SALT.

impregnated with saline matter. In the South of India, on the other hand, where rice is more eaten, the consumption of salt is greater. It is not possible to give the approximate consumption per head in the tracts served through the Northern Indian sources, as the issues are much complicated with those for protected States, and the border districts in each Province are often served from Bombay. But the local returns for the three other large Provinces discount these disturbing factors, as from their more limited and uniform sphere of operations they are able to do. In the results for 1891–92, accordingly, Bombay shows an average of 11·82 lbs. per head, against 11·23 in the preceding year, and 10·41 in 1881–82. Madras, excluding the three northern districts, gives an average of 15·18 against 14·90, and if, again, the Malabar coast be omitted, as it is partly served from Bombay, the rate rises to 16·12 against 16·04, and in 1881–82, it was estimated at 15 lbs. In Bengal, the corresponding figure is 12·09 for 1891–92, whilst that for the previous year, using the figures for the census of February 1891, comes out only 9·13 lbs. The returns for 1881–82 include no such estimate. Before entering into the details of the chief provincial or other systems, a few lines are required as to the return for the country as a whole. In the statistical abstract figures are given relating to the consumption of salt and the total revenue derived from this commodity. These must be taken apart from their relation to the population, for the reason already given above, namely, that the distribution is not regulated by political divisions, but the following table, based on a comparison of each year's figures with those of 1881–82, shows the general course of consumption and revenue. By consumption, however, is meant the supply removed from the State depôts by merchants for retail sale, and these amounts, which vary with the market rates, are usually not entirely disposed of within the year of removal, though, of course, except under apprehension of material rise in the rate of duty, the dealers do not keep any considerable stock in hand. The figures for Burma, which are based on estimates, are not included in the statement of consumption, but as the revenue there is duly brought to account, it has been kept in the total for the whole country.

## COMPARATIVE TABLE of SALT CONSUMPTION and REVENUE.

(*The figures for* 1881–82 = 100·0.)

| Year. | Northern India. | | | | | Bombay*. | | | Madras. | | Bengal. | | India. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Removed for Consumption. | | | | Revenue. | Removed for Consumption. | | Revenue. | Consumption. | Revenue. | Consumption. | Revenue. | Consumption. | Revenue. |
| | Rock. | Brine-pit. | Lake. | Total. | | Brine-wells. | Sea. | | | | | | | |
| 1882–83 - - - | 101·2 | 92·5 | 98·3 | 99·0 | 82·7 | 110·5 | 110·5 | 91·0 | 113·8 | 94·4 | 104·1 | 73·9 | 104·9 | 83·7 |
| 1883–84 - - - | 100·7 | 86·9 | 98·9 | 98·8 | 80·6 | 113·2 | 112·2 | 92·0 | 119·7 | 94·1 | 103·3 | 73·7 | 106·6 | 83·3 |
| 1884–85 - - - | 110·1 | 76·2 | 115·4 | 105·5 | 84·3 | 127·2 | 116·2 | 97·8 | 119·4 | 93·7 | 113·6 | 81·8 | 109·8 | 88·2 |
| 1885–86 - - - | 113·4 | 89·7 | 46·7 | 73·0 | 61·0 | 280·5 | 122·8 | 122·1 | 123·8 | 98·3 | 108·2 | 76·9 | 108·2 | 86·0 |
| 1886–87 - - - | 120·1 | 82·8 | 101·7 | 102·8 | 87·3 | 197·8 | 127·5 | 105·5 | 124·1 | 96·7 | 113·1 | 78·9 | 115·0 | 90·3 |
| 1887–88 - - - | 116·3 | 89·1 | 95·3 | 99·6 | 82·9 | 146·3 | 133·3 | 116·3 | 127·5 | 98·4 | 107·8 | 74·8 | 118·8 | 90·4 |
| 1888–89 - - - | 129·3 | 80·6 | 96·6 | 101·3 | 97·6 | 143·1 | 131·1 | 124·1 | 131·9 | 112·0 | 106·6 | 91·9 | 114·1 | 104·1 |
| 1889–90 - - - | 140·6 | 75·9 | 103·1 | 106·6 | 103·2 | 153·5 | 127·6 | 137·9 | 135·0 | 119·3 | 104·4 | 91·4 | 117·0 | 111·0 |
| 1890–91 - - - | 124·5 | 55·3 | 115·1 | 113·9 | 101·7 | 152·1 | 134·7 | 144·2 | 132·4 | 132·5 | 107·3 | 93·4 | 119·6 | 115·6 |
| 1891–92 - - - | 135·8 | 43·1 | 122·8 | 119·0 | 103·8 | 158·2 | 151·5 | 155·1 | 136·5 | 120·4 | 109·6 | 96·8 | 124·2 | 117·1 |

* The initial year for Bombay is 1880–81, as in 1881–82 sales at Kharaghoda were specially restricted.

SALT.

Variation in supply, &c.

The first point to note is the variation for India as a whole. It appears that after the changes of 1882, the consumption rose very generally, whilst the revenue necessarily suffered a temporary depression. On the raising of the duty again early in 1888 the consumption fell back slightly, only to rebound higher than it had ever been before, and in a far higher ratio than that by which the population, even allowing for the inclusion of Upper Burma, had increased. The revenue, too, expanded to a very marked extent, but in much less proportion than the consumption. In the table we are now discussing the gross figures of receipts are given. In the preceding chapter, where the charges are deducted, the ratio of increase is given as a little below 119 in the last year of the decade, and is higher than that here shown from the year 1887–88 downwards, indicating the growing profit, apart from the actual increase in the transactions, to the public resources. In March 1882, the duty, which had been 2·875 rupees per "maund" in Bengal, and 2·5 rupees elsewhere, was reduced to 2 rupees, as previously mentioned. In Burma, however, and the Trans-Indus tract, the former rates were maintained. The almost immediate results were, first, that the retail prices fell in Bengal by 25 per cent. and elsewhere in lower proportions down to about 8 per cent. in Mysore. Secondly, that the consumption, excluding that in Lower Burma, rose in the following 11 months by 6½ per cent. The highest rate of increase is that in Madras, where not only is more salt required, but the duty had been raised five years before from 1·812 rupees to 2·5 rupees per maund, so that the return to a medium rate was gratefully received. In Bengal, it may be noted, where the duty fell by 30 per cent., the revenue at once receded, though not quite to the same extent. The amount of salt removed rose higher than is shown in the table in question, since a good deal of imported salt made its way into the North-West Provinces, where it competed with the Rajputana Lake salt, to the detriment of the Northern Indian revenue. Bombay, too, entered the field against Sambhar, and held the ground it thus occupied for two years or so. The effect of the change in 1888 has been already noticed to some extent, both in connection with consumption and incidence of revenue and previously with reference to an apparent decrease of something like 2½ per cent. in the quantity consumed. Apparent, is the term used, as it was shown how the rumour of a reduction of the duty to the rate of 1882 caused dealers to refrain from buying for a considerable period. Then, again, the Calcutta market was disorganised for part of the year by the rise in duty, which produced different prices for salt on the sea when the rise took effect and for the stocks that were shipped later. The action of the Salt Syndicate in Cheshire, too, had its effect on prices, aided by a slight rise in freights. But, on the other hand, Northern Indian salt, both lake and rock, found its way further than usual into Bihar, so the consumption showed no reduction. In Madras, prices rose a little, not only in sympathy with the duty, but owing, in some degree, to a combination of the monopolists and dealers, who took advantage of a change of system to operate. The upward tendency, however, which accompanies the growth of population, re-asserted itself in a year, with fair uniformity. The table, it must be understood, does not show the territorial consumption in Bombay and Bengal, since the former now supplies salt to most parts of the Central Provinces, and, as just mentioned, Panjab and Rajputana salt is consumed throughout the upper and middle portions of the Ganges Valley. Orissa, again, is under the administration of the Madras Government, so far as its salt-pans are concerned. On the whole, therefore, a very considerable proportion of the salt that pays duty in one part of India is consumed at a long distance from the place of manufacture.

Amongst other features of the Return under discussion, the following may be specially noticed:—First, the growth of the Madras operations, due, in some degree, to administrative improvement; then the spread of the issues of the large-crystalled article known as "baragara" from the Bombay works on the Rann of Cutch. The trade in the sea-salt of the same coast manifested a lively growth, and extends along the Malabar coast. In Upper India the main features have been the decline in the production of salt from the brine-wells of Sultanpur and Rajputana, and the rapid spread of the traffic in the rock salt from the principal mines. Finally, the comparatively low rate of increase in the issues of salt in Bengal remain to be noticed. Here the supply is almost entirely from foreign countries, and only a few tons are issued

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issued under the Excise regulations from the place of manufacture. The market fluctuations in the case of the former have been capricious at various times during the decade, and the year's transactions here indicate even less than usual the annual consumption. The marginal table gives some of the principal features of the trade in foreign salt, which, it may be observed, is practically confined to Bengal and Burma. In the earlier portion of the period with which we are now concerned Cheshire held the market, with 87 per cent. of the imports of this commodity, but by 1889–90 its share was no more than three-quarters, whilst two years later Liverpool accounted for 61 per cent. only, and Hamburg and Aden were rapidly gaining ground. It is stated that the crushed salt of the two last-named ports is growing in popular favour as the advantage of its use is getting understood. Thus the importation of the German article has increased five-fold in the last five years, whilst that of Cheshire salt has receded by fully 30 per cent. in the same time.

Value of Salt Imported into India.

| Chief Importing Countries. | 1881–82. | 1883–84. | 1885–86. | 1887–88. | 1889–90. | 1891–92. |
|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| United Kingdom | 495,269 | 506,260 | 498,818 | 669,016 | 671,073 | 383,207 |
| Germany | 14,215 | 19,985 | 17,285 | 44,459 | 112,138 | 179,609 |
| Aden | – | – | – | 20,415 | 46,387 | 45,733 |
| Arabia | 24,088 | 21,182 | 22,185 | 56,969 | 50,175 | 12,851 |
| Persia | 4,448 | 4,065 | 3,804 | 3,907 | 10,968 | 2,925 |
| TOTAL IMPORTS | 569,067 | 623,011 | 506,048 | 795,521 | 894,582 | 627,953 |
| *Percentage of Imports on Total Salt Revenue* | 32·44 | 28·49 | 28·70 | 28·40 | 29·06 | 29·32 |
| Percentage of Imports from United Kingdom | 87·03 | 81·26 | 83·69 | 84·10 | 75·02 | 61·02 |

It does not appear that the relative consumption of foreign salt shows more than a slight tendency to fall off, since in 1881–92 the proportion imported to the whole was 32·83 per cent., and at the end of the decade, 27·67. The Excise figures testify in the same direction, as the proportion of the amount paid as import duty to the total gross revenue, fell from 32·4 to 29·3 per cent. So far as Bengal is concerned, there appears to be a slowly growing taste for the inland product wherever the latter can be brought to market at a rate not above that of the imported article. In Burma, such a tendency in favour of local salt is not yet established, and imports predominate to a more marked degree than in the upper portions of Bengal, where there is effective competition between it and rock and Sambhar lake salt.

Imported Salt.

| Year. | Rupees per 100 Maunds. |
|---|---|
| 1881–82 | 51·9 to 60·4 |
| 1883–84 | 56·3 „ 62·3 |
| 1885–86 | 55·9 „ 60·6 |
| 1887–88 | 73·5 „ 80·8 |
| 1888–89 | 88·3 „ 102·6 |
| 1889–90 | 89·8 „ 98·2 |
| 1890–91 | 71·2 „ 81·2 |
| 1891–92 | 57·5 „ 69·0 |
| July, 1892 | 55·5 „ 63·2 |

In concluding this portion of the chapter, it is worth while to add a few lines as to the price of salt. To begin with that from Cheshire, the competition of Germany and Aden seem to have brought the rates down to the extent shown in the margin, and there is a difference of some 33 per cent. between the prices of 1888–89 and those of 1891–92. The table on the next page is extracted from the elaborate series published by the Government of India every year. In these, the initial, or base, figure is the average price of the five years 1871–75.

## QUINQUENNIAL AVERAGE RETAIL PRICES of SALT.

(*Those of* 1871-75 = 100.)

| TRACT. | 1861-65. | 1866-70. | 1871-75. | 1876-80. | 1881-85. | 1886-90. | Single Years | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | 1891. | 1892. |
| Burma: | | | | | | | | |
| Pegu (littoral) | 103 | 116 | 100 | 106 | 106 | 125 | 156 | 147 |
| Pegu, Inland | 80 | 78 | — | 111 | 114 | 147 | 171 | 168 |
| Tenasserim | 74 | 88 | — | 111 | 145 | 167 | 223 | 212 |
| Assam Valley | 97 | 104 | — | 96 | 72 | 76 | 79 | 78 |
| Bengal: | | | | | | | | |
| Central Bengal | 96 | 100 | — | 92 | 71 | 76 | 80 | 79 |
| Orissa | 91 | 103 | — | 87 | 74 | 82 | 86 | 83 |
| North Bihar | 94 | 96 | — | 92 | 69 | 70 | 71 | 70 |
| North-West Provinces: | | | | | | | | |
| North-West Provinces, Eastern. | 107 | 107 | — | 89 | 75 | 70 | 72 | 75 |
| North-West Provinces, Western. | 132 | 125 | — | 93 | 80 | 79 | 82 | 82 |
| Oudh, Southern | 110 | 119 | — | 88 | 75 | 69 | 71 | 71 |
| Panjab: | | | | | | | | |
| Panjab, Central | 98 | 104 | — | 88 | 69 | 71 | 76 | 77 |
| Panjab, North-Western | 88 | 104 | — | 114 | 109 | 107 | 110 | 112 |
| Bombay: | | | | | | | | |
| Gujarath | 88 | 109 | — | 112 | 125 | 130 | 139 | 140 |
| Konkam | 89 | 101 | — | 127 | 128 | 136 | 140 | 136 |
| Deccan | 79 | 95 | — | 118 | 117 | 119 | 118 | 120 |
| Central Provinces: | | | | | | | | |
| Eastern | 89 | 120 | — | 82 | 76 | 75 | 75 | 73 |
| Western | 109 | 120 | — | 85 | 76 | 81 | 86 | 85 |
| Madras: | | | | | | | | |
| Malabar | 81 | 93 | — | 127 | 117 | 117 | 124 | 127 |
| North Central | 124 | 132 | — | 119 | 117 | 134 | 143 | 141 |
| South Central | 83 | 101 | — | 110 | 102 | 111 | 116 | 117 |

Generally speaking, prices have risen notably where salt is produced, and fallen where it is imported, except, of course, in Lower Burma, and also, it appears, in the Deccan, both under the Madras and the Bombay administrations.

## G.—ASSESSED TAXES.

ASSESSED TAXES.

The history of assessed taxation in India is not a long one. In the days preceding the British occupation it appears to have been customary to impose a tax on trades in towns, if not in the rural tracts; but professions, such as they were in those days, seem for the most part to have escaped taxation. From what has been said in connection with the general finances of the country, it will have been gathered that the bulk of the population lived then, as now, and to even a greater extent, on the soil, which was taxed separately. In the villages, the petty traders that are alone called into existence by the simple needs of the cultivating classes, no doubt had to bear their share of the communal burdens in some form or other, but the artisan was a part of the community itself and paid for his services, as a rule, by a share of the village lands. As to professions, all the greater and more honourable were monopolised by the literate, that is, generally speaking, the priestly, class, which was by tradition exempted from taxation.

Assessed Taxes.

Some of the taxes above mentioned on trades and handicrafts were continued by the British administration for many years, especially in Madras and the Central Provinces. In the latter, indeed, a sort of license tax thus handed down survives to the present day, and has been formally recognised in an Act of the Governor General's Council, passed in 1867. The income tax has had a rather chequered career. Originally imposed in 1860–61, its rate and scope were repeatedly altered until 1873, when the tax was not continued. In substitution thereof a license tax was extended over India from the North-West Provinces in 1878, imposing fixed fees on income from trades and handicrafts above a minimum amount which at first varied, but was subsequently made uniform at Rx. 50 per annum. In all cases a maximum fee was fixed, so that incomes of Rx. 1,000 and those of Rx. 100,000 paid alike. The income tax with which we are now concerned was imposed under Act II. of 1886, and took effect from the year 1886–87. The main features of the tax thus established are, first, that the rate of impost is higher on incomes of Rx. 200 and upwards than upon those below it but above Rx. 50, which is the minimum taxable, except in the case of military officers, who are exempt up to the limit of Rx. 600. In the higher section of incomes the rate is "five pies in the rupee," which is equivalent to ·026, or, to put it in a more familiar light, just under $6\frac{1}{4}d$ in the £. The lower rate is but four pies, or practically the equivalent of $5d$. in the £. But the profits of Companies carry the higher rate throughout. Income from public securities is exempt in the case of any one who can show that his annual emoluments from all sources are not above Rx. 50 and otherwise are liable to one of the two rates above mentioned. As to salaries above the minimum taxable, they are charged at the two rates respectively at the time of payment. Other sources of income are taxed in groups at fixed rates each, as was done in the case of the license tax up to Rx. 200, after which the five-pie rules comes into operation. There are necessarily special cases of exemption, but the only general one is that of agriculturists, who are the subject of a special definition in the Act.

As regards the administration of this branch of the revenue, it may be observed that any form of direct taxation in India, except that of assessment on the arable land, is obnoxious to objections of some sort or other. In the first place, the means of accurate assessment in the majority of cases outside the Presidency towns are not to be found, and the alternative, which is known as "the best means available," is not entirely satisfactory to either assessor or the other party to the transaction. The sentiment of the inviolable privacy of one's affairs has been handed down from the days when to be a well-to-do citizen was equivalent to being marked down as the quarry of the local State official, and in numbers of cases amongst the trading classes in many parts of India the system of book-keeping adopted bears direct reference to the preclusion of the information from the cognisance of any but the trader himself and those whom he has had to initiate into the mysteries of his accounts. The professional classes have not only the resentment of being subjected to taxation at all, but, as so many of them live on salaries either from the State or private employers, their chance of escape is, under the present Act, seriously diminished, and, as the local press is largely in their hands, more is heard against the tax than would be the case if only the trader and artisan were made to contribute. There is also this to be said, that there is the probability, if no more, of an unequal distribution of the burden, operating against those who, like the European merchants and bankers and the Native firms who do most of their business with them, keep regular accounts, and in favour of the assessee, possibly equally liable, who throws the duty of estimating his income entirely upon the assessing officer, the latter being naturally averse from fixing what he thinks may be an excessive tax on the mere chance that the revising officer may on objection be successful in getting by this means some definite statement to go on. The details given below will serve to show that whatever the demerits of the tax in other respects, the provisions relating to revision, at all events, are understood and appreciated by the classes who are affected by them.

In considering the operation of the income tax it must be borne in mind that we are dealing, first of all, with a population almost purely agricultural, amongst whom the land is subdivided, for the most part, into peasant-holdings, and, secondly, that this great majority is exempted from the tax in question.

Secondly

Secondly, that the urban element amounts to little more than 9½ per cent. of the whole, that most of the towns are little better than local markets, and that industrial centres are few and scattered. It is worth while, again, not to drop out of sight the fact that under the social system by which popular sentiment is guided throughout the bulk of the masses, the artisan has always been placed at a discount by the leaders of social opinion, on the one hand, and that the trader, on the other, has gained his footing in the village life of India against the traditions of the agriculturist, and mainly through the operation of the general protection afforded to all alike under the shield of British rule. It is not surprising, therefore, to find that a non-agricultural impost brings in but little to the public treasury from anywhere outside the walls of the larger towns, or that the seats of foreign trade should bear so remarkably high a proportion to the total yield, compared to that borne by their population, to that of the rest of the country. ASSESSED TAXES.

To come to the statistical results of the assessed taxes, we may omit further reference to the license tax that gave place to the income tax six years ago. The following table, accordingly, deals with the latter and with the small impost confined to the Central Provinces, which is, in fact, a license tax on a restricted scale.

| HEAD. | 1886–87. | 1887–88. | 1888–89. | 1889–90. | 1890–91. | 1891–92. |
|---|---|---|---|---|---|---|
| I. Income Tax: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Ordinary collections | 1,354,735 | 1,431,436 | 1,520,940 | 1,154,227 | 1,173,640 | 1,204,849 |
| Deductions from civil salaries and pensions. | | | | 197,575 | 201,312 | 211,798 |
| Deductions from military and public works salaries. | | | | 115,125 | 116,841 | 117,279 |
| Deductions from interest on public securities. | | | | 85,152 | 89,591 | 83,151 |
| Recoveries from surplus profits of railways. | | | | 21,696 | 15,361 | 21,439 |
| Penalties | | | | 4,806 | 3,645 | 4,731 |
| Other items | | | | 8,713* | 9,051* | 1,585 |
| II. Pandhri (license tax) | | | | 7,980 | 7,955 | 7,991 |
| TOTAL | 1,354,735 | 1,431,436 | 1,520,940 | 1,595,274 | 1,617,396 | 1,652,823 |
| Deduct refunds | 27,067 | 19,949 | 16,298 | 13,554 | 16,506 | 14,726 |
| TOTAL NET RECEIPTS | 1,327,668 | 1,411,487 | 1,504,642 | 1,581,720 | 1,600,890 | 1,638,097 |
| Charges | 50,158 | 28,679 | 27,128 | 27,681 | 29,246 | 29,577 |
| TOTAL NET REVENUE | 1,277,510 | 1,382,808 | 1,477,514 | 1,554,039 | 1,588,150 | 1,608,520 |

* Including Upper Burma receipts.

In the Budget statement following the introduction of the Act of 1886 it was estimated that the results of the changes, of which mention has been made above, would be to add some Rx. 735,000 to the public resources. The actuals, however, have been continuously better than that estimate. The cost of assessment and collection has been insignificant since the first year, and is now almost confined to Bombay city and Bengal, both of which have not the advantage of local revenue establishments such as can be utilised, once the assessment is made, for ministerial purposes.

The general result, it may now be noted, is an increase in the actual collections amounting to 22 per cent., which is due, in the main, to the

ASSESSED TAXES.

expansion of the items coming under the head of "India (General)," such as profits of railways and interest on securities, and to the extension of the tax to the towns of Burma. The following table will show the share of the various provinces in the whole sum.

GENERAL TABLE of ASSESSED TAXES by PROVINCES.

| PROVINCE. | 1886–87. | 1887–88. | 1888–89. | 1889–90. | 1890–91. | 1891–92. | Percentage on Total. | | Percentage of Increase over 1886–87. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 1886–87. | 1891–92. | |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | | | |
| Madras | 154,345 | 168,146 | 169,107 | 183,416 | 182,718 | 190,944 | 11·4 | 11·5 | 23·7 |
| Bombay | 316,459 | 351,515 | 353,768 | 364,426 | 360,867 | 369,647 | 23·4 | 22·4 | 16·8 |
| Bengal | 364,457 | 383,515 | 400,763 | 426,537 | 433,082 | 437,519 | 26·9 | 26·5 | 20·0 |
| North-West Provinces | 222,068 | 218,828 | 222,561 | 226,058 | 229,869 | 227,721 | 16·4 | 13·8 | 2·5 |
| Panjab | 112,377 | 110,488 | 117,303 | 124,374 | 132,437 | 133,192 | 8·3 | 8·1 | 18·5 |
| Central Provinces* | 40,346 | 40,844 | 42,749 | 47,026 | 46,856 | 45,500 | 3·0 | 2·7 | 12·7 |
| Assam | 20,505 | 23,004 | 22,399 | 22,973 | 22,438 | 23,022 | 1·4 | 1·4 | 12·2 |
| Burma | 16 | 32 | 51,680 | 61,620 | 65,880 | 73,369 | — | 4·4 | — |
| India (General) | 124,162 | 135,064 | 140,610 | 138,844 | 143,249 | 151,909 | 9·2 | 9·2 | 22·3 |
| TOTAL | 1,354,735 | 1,431,436 | 1,520,940 | 1,595,274 | 1,617,396 | 1,652,823 | 100·0 | 100·0 | 22·0 |

* In the Central Provinces the license (Pandhri) tax is also in force, and is included in this statement.

Omitting Burma, Madras shows the greatest proportional increase, but the actual amount collected there is less than half that derived from Bombay and Bengal. It also appears that this Presidency, like Bengal, Assam, and the Panjab, has kept its place in the serial order, whilst Bombay has lost a little and the North-West Provinces a good deal, by the inclusion of Burma and the quicker growth of the revenue from the tax in other parts of India. Before proceeding to a further branch of the subject, it is advisable to interpolate a few lines regarding the position of the two chief Presidency towns, Bombay and Calcutta, in reference to the tax. This point can be put very briefly by the use of proportional figures. These two towns, that is to say, contain 0·7 per cent. of the population liable to the income tax, but 11 per cent. of the persons assessed to it, and pay, between them, no less than 27 per cent. of the whole tax. Thus, while in every 10,000 of the general population in question, 18 are assessed, in these two towns that number rises to 298. Each person assessed, moreover, outside the above limits, pays, on an average, an income tax of 29 rupees, but within them he would be subject to an incidence of 80·33 rupees. Distinctions like these run through the whole series of the statistics with which we are now dealing, so in the following tables it has been thought advisable to give, in most cases, the Provinces in question without, as well as with, their respective capitals.

The next point to be noted is the number of persons that pay the tax, which may be roughly put down as about 403,000 every year. On first starting, in 1886–87, the number was a little over 397,000. This is the number, according to the returns, of incomes amounting to more than Rx. 50 per annum from other sources than agriculture, in a population of some 214 millions. The following

following table gives the proportional figures bearing on this point for each of the chief Provinces.

ASSESSED TAXES.

| PROVINCE. | Number of Assessments per 10,000 of Population. | | Incidence per head of Population. | | Incidence per Assessment. | | Classes of Incomes assessed in 1891-92. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | I. Salaries and Pensions. | | | II. Profits of Companies. | III. Interest on Public Securities. | IV. Other non-Agricultural sources of Income. |
| | 1886-87. | 1891-92. | 1886-87. | 1891-92. | 1886-87. | 1891-92. | State. | Others. | Total. | | | |
| | | | Rupees. | Rupees. | Rupees. | Rupees. | | | | | | |
| Madras | 15 | 16 | ·046 | ·053 | 29·03 | 29·95 | 17·4 | 9·3 | 26·7 | 2·5 | 4·2 | 66·6 |
| Bombay | 42 | 43 | ·179 | ·196 | 39·78 | 43·71 | 8·6 | 10·9 | 19·5 | 11·9 | 6·7 | 61·9 |
| Ditto without city | 32 | 32 | *·104* | *·104* | *29·15* | *30·97* | — | — | *21·5* | *1·5* | *11·0*‡ | *66·0* |
| Bengal | 15 | 15 | ·052 | ·061 | 36·52 | 37·36 | 11·4 | 11·6 | 23·0 | 7·2 | 1·3 | 68·5 |
| Ditto without Calcutta | *12* | *12* | *·031* | *·035* | *25·19* | *26·36* | — | — | *26·1* | *0·9* | *0·6* | *72·4* |
| North-West Provinces | 16 | 16 | ·048 | ·048 | 29·48 | 29·61 | 12·6 | 4·6 | 17·2 | 3·2 | 1·7 | 77·9 |
| Panjab | 19 | 22 | ·056 | ·064 | 25·28 | 25·84 | 15·8 | 4·4 | 20·2 | 1·4 | 1·0 | 77·4 |
| Central Provinces | * | 10 | ·039 | ·042 | * | 33·75 | 19·3 | 2·0 | 21·8 | 5·0 | 0·4 | 72·8 |
| Assam | 12 | 13 | ·039 | ·042 | 29·67 | 30·24 | 17·0 | 37·2 | 54·2 | 0·3 | 0·1 | 45·4 |
| Burma | – | – | — | — | — | 39·27 | 30·5 | 14·1 | 44·6 | 10·3 | 1·2 | 43·9 |
| TOTAL | 18 | 18† | ·067 | ·075 | 33·32 | 34·71 | 13·1 | 9·8 | 22·9 | 6·7 | 3·0 | 67·4 |

* Return not available. † Omitting the Central Provinces, the average is 19.
‡ In Bombay the securities are dealt with locally, whilst in Calcutta they appear mostly in the Return of the Government of India, which is here excluded.

From the first columns it will be seen that there has been little substantial difference in the distribution since the trial assessments of 1886–87. The return for that year in the Central Provinces was not available for incorporation, but it appears that the low average in that tract in 1891–92 is to some extent due to the concurrent imposition of the pandhari or licence tax, above mentioned. The next section of the table shows that, except in the Panjab, the increased incidence per head is practically restricted to the two chief Presidency towns. This incidence, it should be mentioned, is based, in the case of 1886–87, on the mean population between 1881 and the last census, in order that the great increase that occurred in some provinces may not be deprived of its due weight in determining the average. In Madras, where the rise was nearly the same as that in the Panjab, the original assessment was, no doubt, too light. The difference between Bombay, even subtracting the figures for the capital, and the rest of the provinces, is very clearly denoted in the table. Double the number, proportionately to the population, are here assessed than is brought into the net in Madras and the North-West Provinces, and more than double that in Bengal, even with Calcutta thrown in. At the same time, the assessment per head of those on whom it falls is almost the same as that in Madras, Burma, and the North-West Provinces, and not much above that in Bengal and the Panjab. Taking the whole amount, omitting that levied in Bombay and Calcutta, the incidence per assessee outside those towns is about 29 rupees. In the above computations the assessment for the current year is taken into consideration, and the arrears of former years, with the small amounts levied as penalty and so on, are disregarded. In respect to the two chief cities, it appears that Calcutta, though it now yields a smaller revenue than Bombay, has had a much steadier assessment; since in 1886–87 the incidence was 82 rupees, and six years later 85 rupees, whereas in the western capital the corresponding rates were 68 and 74 rupees respectively. The proportion of higher incomes is thus larger on the Hughli.

To return to the table under consideration, the last section is occupied by the proportions borne to the total amount collected by that from the four different classes of incomes. It appears that over one-fifth is levied on salaries and pensions, and in the return for 1886–87, in which this point was specially noted, it was shown that 72 per cent. of the salaried assessees were in receipt of their incomes from the State, with an average incidence of only one-sixth that of the rest, indicating, apparently, the more efficient sweep of the Government net over its own employés. In the present return, which deals with the

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year 1891–92, the proportion of the contributions of State-paid assessees is lower than the general mean in Bengal, Bombay, and the North-West Provinces only, and much above that rate in the Central Provinces and Burma. In Assam the proportion of private employés is abnormally high, owing to the special character of the colonisation of the valley. The next class, that of profits of Companies, is prominent in Bengal, Burma, and Bombay only, and, of course, in the capitals alone, since many, if not most, of the larger concerns in the interior have their head office in those towns, As regards the interest on securities, the only remark necessary is that the difference between Bombay and Bengal in this respect is due apparently to the inclusion of the tax in the latter under the head of "India (General)," as the Government of India deals with the transactions at the Presidency, whereas, on the west coast, the duty is performed by the local Accountant-General. We then come to the last column, and it is here that we find the great body of assessees other than Government servants. The general average, it may be noticed, is pulled down by the preponderance of the Companies in Bombay, and those of salaries, &c., in Madras, irrespective of the abnormal prevalence of salaries in the otherwise small contributions of Assam and Burma. The component parts of this class are, obviously, too numerous to be treated of in this review, and, after the first few years of the levy of the tax detailed statements were discontinued. From the earlier ones we learn that the chief contributory income is that derived from lending money, to which is credited more than a third of the assessments in Bombay, the North-West Provinces and the Panjab, and about a quarter in Bengal and Madras.

The last point that need be here dealt with is the distribution of the assessees and of the classes of income in connection with the amount, not the source. The following table gives a fair general *résumé* of these two facts.

| PROVINCE. | A.—Percentage on Total Assessments of— | | | B.—Percentage of Tax paid by— | | C.—Percentage of Final on Original Demand. | |
|---|---|---|---|---|---|---|---|
| | Incomes of Rx. 50–75. | Incomes of Rx. 50–200. | Incomes of Rx. 200 and over. | Incomes of Rx. 50–200. | Incomes of Rx. 200 and over. | Number of Assessments. | Amount of Demand. |
| Madras | 51·8 | 88.3 | 11·7 | 44·1 | 55·9 | 93·6 | 93·5 |
| Bombay | 44·7 | 86·1 | 13·9 | 32·2 | 67·8 | 96·1 | 94·5 |
| Bombay, *without City* | *46·6* | *89·3* | *10·7* | *48·1* | *51·9* | *95·9* | *94,1* |
| Bengal | 54·0 | 87·6 | 12·4 | 34·9 | 65·1 | 97·4 | 96·7 |
| Bengal, *without Calcutta* | *57·2* | *90·4* | *9·6* | *49·6* | *50·4* | *97·3* | *96·8* |
| North-West Provinces | 49·4 | 86·7 | 13·3 | 48·2 | 51·8 | 95·2 | 94·7 |
| Panjab | 47·6 | 90·2 | 9·8 | 55·1 | 44·9 | 94·9 | 93·5 |
| Central Provinces | 41·3 | 85·5 | 14·5 | 41·0 | 59·0 | 99·0 | 98·7 |
| Assam | 50·5 | 81·6 | 18·4 | 38·7 | 61·3 | 93·3 | 94·3 |
| Burma | 43·3 | 82·3 | 17·7 | 36·1 | 63·9 | 91·8 | 88·0 |
| TOTAL | 49·3 | 87·1 | 12·9 | 39·4 | 60·6 | 95·6 | 94·9 |

The proportion of incomes under Rx. 200 is, on the average, 87, and nowhere falls below 81¼ per cent. It is highest in rural Bengal and the Panjab, and lowest in Assam and Burma, where the operation of the tax is, in both cases, peculiar. We find that, except in the Panjab, the incomes of Rx 200 and over everywhere pay more than half the amount levied, and in Bombay and Bengal, including the capitals, the ratio rises to two-thirds. Another feature that is very prominent in these figures is the remarkable predominence of the number of persons assessed on the minimum income liable to taxation, namely, Rx. 50 to Rx. 75. The general average amongst the population taxed, taken as a whole, is a fraction below one-half. The proportion rises, however, in Bengal to 57 per cent., and falls in Burma to 43. The case of the Central Provinces is a special one, owing to the competition of the local license fee. It is in connection

tion with this class that the operation of the impost requires to be most strictly watched, since the tendency too often to recruit the sub-divisional list by the inclusion of non-agricultural incomes the amount of which is, from the nature of the occupation as carried on in India, insusceptible of proof, whilst as years pass by, the lowest grade is apt to be also reinforced by accretion from above, where luck on revision has resulted in a reduction of the original demand. In fact the assessing officer arrives at the conclusion that the leading members of certain sections of the village community are, or ought to be, liable to the tax, but is uncertain as to the class in which he should place their income. In some cases under the License Act which gave place to that under discussion, experience showed a tendency for the lowest class to gradually rise in higher proportion than the rest of the list, and the results of revision, in the present instance, indicate that the amount is more often reduced than the number of assessees. Assessed Taxes.

If we deduce roughly from the figures on which this table is based the amount of income taxed, the result will be somewhere about Rx. 69¾ millions, a sum that seems very small in comparison with the 415 millions, or so, taxed in England and Wales on the corresponding system. Still, we are here dealing with but a fraction of the people, and that fraction has taken but within comparatively recent times to lucrative trade on the large scale that has for generations been open to Europe.

Finally, there is the important question of revision of the assessments. It appears from the returns that the provisions of the Act in reference to this safeguard are well understood, and advantage is taken of them in a great number of cases. The results are shown in the two last columns of the table, and may be stated to amount to a reduction of the tax first imposed to the proportion of 5 per cent., or, as above noticed, in a slightly higher ratio than that of the persons exempted on revision. Except in Burma, the results are singularly uniform. Revision.

## CHAPTER XII.

## AGRICULTURE AND METEOROLOGY.

AGRICULTURE AND METEOROLOGY.

IT is superfluous, after all that has been written in the preceding chapters, to dilate upon the place occupied by the two subjects with which this review has now to deal, in a country that looks mainly to cultivation and pasture for its sustenance. It is equally out of place to attempt to enter into the details of the many and important questions involved in so wide a field of observation. The first point, accordingly, that will come under notice is the attitude of the State in India towards agriculture. A very general description of the chief features of cultivation will follow, and the subject must close with a short abstract of the work of the meteorological observers, the results of which are so intimately connected with the first topic.

Departmental Organisation.

Soon after the famine in Orissa, in 1866, the attention of the Government of India was drawn to the necessity of placing the local information about the condition and prospects of agriculture in different parts of the country on a footing where it would be of general utility, and also of taking some steps to investigate, and, where possible, to improve, the methods and scope of cultivation that prevailed amongst the masses of the peasantry. The matter was dropped, however, for a time, but revived a few years later, when the English cotton manufacturers directed the attention of the home authorities to the opening for Indian produce, if only the quality were somewhat improved. The result was the establishment of a new branch of the Secretariat of the Government of India in 1871, to be in charge of the Revenue, Agricultural, and Commercial business. After eight years the experiment was withdrawn, partly owing to financial pressure, and partly, no doubt, because the original scheme had not been thoroughly extended over the different provinces. The recommendations of the Famine Commission of 1880, however, placed the matter in a different light, and in 1881 the Department was resuscitated, and arrangements gradually introduced for providing the complement in each province of the assistance required in order to carry out the policy for the furtherance of which the central directing agency had been re-established. The objects of the new departure, broadly stated, are:—

> First, to ascertain more systematically and completely, and to render more generally available, statistics of important agricultural and economic facts, in order that the Government and its officers may be always in possession of an adequate knowledge of the actual condition of the country, its population, and its resources.
>
> Secondly, to pay attention to the general improvement of Indian agriculture, with the view of increasing the food supply and general resources of the people.
>
> Thirdly, to effect the better and more prompt organisation of famine relief, whenever the actual approach of famine may be indicated by the statistical information mentioned in the first paragraph above.
>
> In fine, agricultural inquiry, agricultural improvement, and famine relief.

In accordance with the original proposals, Departments of Agriculture were established in all the provinces, according to the local system of administration, some being entrusted with more, some with less, multifarious duties, but all tending in the same direction. In most of the provinces of India there is already available an agency which, when properly trained, is invaluable as regards the collection of agricultural statistics, namely, the village accountant, an institution of very long standing, but of uncertain quality. One of the main duties of the local Department, therefore, was to get the best work possible out of this class, not only in reference to the more or less routine information that had been hitherto customary, but, by training, inspection, and other methods, to extend its sphere of usefulness, until, ultimately, the results of its work could be relied on as the foundation of the whole of the revenue and agricultural statistics of the country. To effect this, the Provincial Director of Agriculture became also the Director of Land Records. The object aimed at has, no doubt,

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doubt, been to a great extent attained, though, as is always the case in a country so diverse in its conditions and systems of administration as is India, the improvement in efficiency of the subordinate establishments has not proceeded altogether at uniform rates. On the information thus obtained, to resume the course of the general description, the province is subjected to minute analysis, so that its component tracts can be distributed according to agricultural capabilities; that is, the capacity for resisting the effects of bad seasons. It may be borne in mind, in connection with this point, that in India it is generally the deficiency, not, as in England, the excess, of moisture that the farmer has to combat, so that the inquiry has to enter into questions of irrigation rather than of drainage, though in parts of the country the latter has also to be considered. This analysis has been described as "the pivot of the whole scheme," as so many factors enter into it beyond the merely physical characteristic just mentioned. The difficulties involved are well set forth in the Orders of the Government of India on the organisation of the new Department in 1881. It is needless to remark that the allocation of the various tracts under their respective heads, as above-mentioned, is not based on the local statistics alone, but the Director of Agriculture has to avail himself of much other information, such as the appraisement of the outturn of the chief crops grown in the neighbourhood, which is usually effected by a number of experiments on individual estates by independent investigators, helped by the results obtained at the Government experimental farms, and by other means. Current use is made annually of the information collected from the village returns and through the local inspectors, in framing forecasts of the area and probable outturn of the crops in which the commercial community is most interested, such as cotton, wheat, and the like. Under the auspices, again, of the Agricultural Department, a Dictionary of the economic products of India was prepared during the decade by Dr. G. Watt, C.I.E., a work which has materially added to our knowledge of the great natural resources of the country. Another special feature in the arrangements of 1881 is, that the Secretary is not obliged, like his colleagues, to be continuously at the head-quarters of the Government of India, but, in his capacity of, as it were, the Inspector General of the Agricultural Departments of the provinces, he is allowed to travel for some months every year. By this means, as well as by frequent conferences held at convenient times and places under his presidency, many matters of detail are settled, after more consideration and fuller knowledge of local circumstances than would be the case were the whole business of so varied a nature as that which comes under the general title of Revenue and Agriculture relegated to correspondence.

Famine Administration.

Passing by, for the present, the second head of the work of the reorganised Agricultural Departments, namely, the improvement of Indian agriculture, we come to the work done in connection with famine administration. Happily, with the exception of the last year of the decade now in question, the country has enjoyed an unusual and fortunate immunity from actual or, relatively speaking, widespread distress. But, from the experience of past years, there was no reason to anticipate a succession of so many average seasons without a failure of rain that might have results in certain tracts not far removed from famine. The recommendations of the Famine Commission of 1880 were therefore early taken into consideration. The first step was the preparation of what is known as the Local Famine Code. This, which deals with the administration of famine relief in all its branches, includes provision for the agricultural cattle. A provisional form or skeleton was framed at a conference to serve as a standard for the provincial codes, and the latter, after being locally discussed, were sent up to the Government of India for sanction. In the light of the experience gained in one or two tracts, where State relief has been given during the last seven or eight years or so, these codes have been subjected to modification in a few points of detail since they were first framed, and when brought into operation, during the year 1891-92, which was an unfortunate one in the South Deccan, their provisions stood the test well. They provide, it may be stated, for the regular supply of such information as will indicate the first approach of scarcity, and the prompt submission of supplementary information, or the appearance of actual want. So far, the local agricultural authorities are in charge of the matter, but, on the commencement of actual relief, the executive duties fall to the District officers. In regard to the relief of

distress of this sort, lists of works of the character best suited to the purpose are kept in readiness, and, whilst the district officer is in general charge of the operations, the larger works are placed under professional agency. There are special rules, which need not be here cited, referring to the task, the wage, and the grouping of the able-bodied by families, caste, and so on, the regulation of supplies of food, of markets, sanitary arrangements, and medical inspection and advice. Gratuitous relief occupies another portion of the code. On this point there was, as might be supposed, some differences of opinion, but, in the main, the rule is, that relief may be given by villages, under strict systems of inspection and supervision, or abuses are sure to creep in. The whole of the district liable to famine is parcelled out beforehand into circles of inspection and relief, when necessary, and in accordance with these territorial units, poorhouses, temporary hospitals, and other arrangements are provided. The supply of food in such tracts is a matter which however important 14 or 15 years ago, has now adjusted itself in the course of the great extension of railways that has taken place within that period. There are exceptional localities, no doubt, such as those in the hill tracts, where special facilities for private importers may have to be provided by the Government, but, as a rule, the harvest of one part of the country can now be transported to any other part where the local outturn happens to be insufficient, so that not only are famine prices seldom or ever heard of for more than a week or so, but the producer has always a market for the surplus of a bumper crop, which, in the pre-railway days, he was obliged to leave to rot on the ground or to spoil or be eaten by insects in subterranean store pits. The meteorological data at present available justify the inference that, speaking roughly, the same climatic influence in any one year affects, perhaps, two-thirds of the country and no more, whilst the remaining third is affected in the opposite direction. Thus, even if a bad current passed over a considerable portion of India, there would still be, at least a third part of the whole of the cultivated area that would probably be enjoying exceptional plenty. Another topic that may be well taken in connection with the administration of a famine is the relaxation of the State demand on the land, a measure which has been already briefly mentioned in a former chapter. From a statement incorporated in a Note issued by the Government of India on this subject it appears that during the last 10 years the annual average amount of land revenue suspended was Rx. 45,860, and of that remitted, Rx. 190,630. The latter sum, however, includes Rx. 110,000 remitted in the Madras Presidency, where the system is different from that elsewhere. The same may be said of the Rx. 16,700 similarly set down against Sindh. But there has been, no doubt, in the north of India, where this sort of relief was most required, a considerable relaxation of the former rules. On the whole, what with the improved staff of village accountants, the provincial centre for the co-ordination of the information obtained from them, the supply of plans for local works kept in readiness, and the definite programme of procedure laid down by the provincial famine codes, the administration in India is now in a very superior position to that it occupied in 1876–78, when called upon to deal with a calamity of this sort. Moreover, the doubling the railway mileage has necessarily relieved the State of most of the burden and responsibility connected with the actual introduction of food into the affected districts, and it is highly improbable that the spectacle will again be visible of whole trains of grain-trucks blocked at various stations all up the line, for want of free and regular circulation between the place of growth and that of discharge. A bye-result of the extension of railways may as well be here mentioned, as being directly connected with the agricultural conditions of the present day, and this is the increased value it has given to carts and plough cattle, owing to the constant employment that can be now found for both during the dead season of field operations, in plying between the market town and the nearest railway station. The throwing open gratuitously of the grazing grounds that have been placed under the administration of the Forest Department in times of distress, too, is a feature of famine administration worth mentioning, though it appertains more strictly to the subject of the next chapter. These grounds have been reserved within comparatively recent times, and are stated to have much improved in the quality and quantity of their produce by judicious management. The benefit, therefore, is all the greater when, as is sometimes done along the western edge of the Deccan, the cattle

cattle of the dry tract are admitted for a few months to the reserved area free of charge.

The system of advancing money from the State Treasury on the security of the land which it is intended to improve out of the proceeds of the loan, has made considerable progress within the last few years. Generally speaking, the loan is for well-sinking; but there are tracts in which the work to be undertaken is just the reverse, and is intended to keep out water instead of providing it. The returns show that from Rx. 48,080, that were advanced in 1881–82, the sum had risen to Rx. 206,380 in 1891–92. It may be noted that in many parts of India wells are not needed, whilst in others they are not practicable. The tracts where they are both necessary and practicable are, roughly speaking, the uplands of the East and South-East Deccan, Northern Bengal, the middle of the North-West Provinces, and the south and centre of the Panjab. In the large "black soil" tract of Western India, and in the heavy rainfall of Burma, Lower Bengal, Assam, parts of Madras, and the Central Provinces, wells are not required, and in the first and last would be positively injurious to the cultivation. In the tracts for which statistics of well-irrigation are available it appears that in the last six years the area thus watered has increased by 16 per cent., and if the tracts where this mode of assisting the preservation of the crop is neither necessary or possible be excluded, the proportion of the remainder thus protected is not far short of 30 per cent. It is also the species of small cultivation in which the Indian peasant is admitted to excel.

Agricultural Improvement.

We finally come to agricultural improvement, the most difficult of all the specified objects for a State Department to undertake. That the agriculture of the country is in need of improvement is beyond question. The arable land is a limited factor in the case, and the population is every year getting nearer to terms of equality with it. At present, in the greater part of the country, there is still a considerable area of land suited to cultivation that is available for newcomers, but this is not the case universally, and in the more thickly populated tracts, such as Bihar, Oudh, and the North-West Provinces, along the southern coast of Bombay, and in the centre of the submontane tract of the Panjab, not all, but nearly all, the land that will support human life in the present conditions has been taken up. As there is either waste land at a not unreasonable distance in several of the above cases, and in one at least, the means of living by non-agricultural labour, the question is probably approaching its acute stage in Bihar alone. But everywhere the state of affairs generally in the rustic world, and the experience afforded by the returns of the last census of what the Indian peasant can do in favourable circumstances in the way of re-peopling a tract, and what his compeer in Burma is doing on fresh ground, all indicate the need of looking, not to extension of cultivation, as in the past, so much as to its intension; that is, to the increase of the produce from the area already under the plough, rather than to the increase of that area. With this object in view, investigation with care and patience has obviously to precede experiment. In the salad days of agricultural enthusiasm in India it seems to have been thought sufficient if a product or method had proved successful under any conditions whatever, and it was promptly transplanted to India, where it met the fate of so many exotics. Against this danger the Reporter on economic products is now a prophylactic, with the zest added by the study and the record of the results of the experiments of the innovators of the preceding generation. Model farms, under that title, at least, have ceased to exist, and experimental institutions have taken their place. Specialists have been recently called in to investigate the nature of the more prevalent diseases of plants and animals, and a Civil Veterinary Department was established within the last six or seven years, for the treatment of cattle and stock generally. As regards cultivation itself, it has taken some time to find out that a rude or simple process is not necessarily ineffective in obtaining its object, and as often as not is based on empirical knowledge which is only demonstrated to be correct in the course of the failure of the more scientific or complex method which it is proposed to substitute for it. The first step in the desired direction, therefore, was, obviously, to discover where improvement was required, and the next, when information on this point is complete,

AGRICULTURE AND METEOROLOGY.

Dr. Voelcker's Report.

complete, to introduce improved methods and staples into the present system of agriculture. In 1889, accordingly, the Secretary of State deputed Dr. Voelcker, the Consulting Chemist to the Royal Agricultural Society of England, "to advise upon the best course to be adopted in order to apply the teachings of agricultural chemistry to, and in order to effect improvements in, Indian agriculture." Dr. Voelcker has since published his very comprehensive and valuable Report, and a conference of members of the Agricultural Departments of the different provinces has been held to discuss his proposals and the best means of giving effect to those of which there is the more urgent need. This, however, is a matter that refers to a time posterior to that with which we are now dealing. As regards the conclusions at which Dr. Voelcker arrived, it is worth while to cite a sentence or two from his introductory chapter, which embody the view of the subject taken by a competent expert: "It is true that, no matter what statement may be made as deduced from the agriculture of one part [of India], it may be directly contradicted by a reference to the practice of another part; yet the conviction has forced itself upon me that, taking everything together, and more especially considering the conditions under which Indian crops are grown, they are wonderfully good. At his best, the Indian cultivator is quite as good as, and in some respects the superior of, the average British farmer, whilst at his worst, it can only be said that this state is brought about largely by the absence of facilities for improvement, which is probably unequalled in any other country, and that the raiat will struggle on patiently and uncomplainingly in the face of difficulties in a way that no one else would." Dr. Voelcker goes on to say that, though the raiat's practice is as good as can be desired, it by no means follows that there is nothing left to teach him, or that the sole need for improvement is in respect to the supply of water and manure. On the contrary, he expressly points out that the raiat is always ready to adopt an improvement, provided that he has clear proof, intelligible to the ordinary bucolic mind, that he will profit by the innovation. Of the truth of this observation there is no lack of testimony in the course of the last 30 years of Indian agriculture.

It is not possible to give an adequate summary of the report in question within the space available in this review, so a few of the chief points only will be extracted for mention. The author notices, as all observers must do, the difference in India between the quality of the cultivation of different classes or castes, in the same locality, and the greater aptitude of some than of the rest for assimilating new ideas on cultivation. For the benefit of those who are thus willing to learn, the dissemination of the rudiments of scientific agriculture would be, he considers, a measure attended with good results. Indeed, he finds the want of such knowledge everywhere retards the spread of agricultural improvement, and not only amongst the rustic population. In respect to the maintenance of the present degree of fertility in the soil, so far as such a course is possible, the inadequacy of the manure supply is noted, and the waste of fertilising material that goes on in all parts of the country is deplored. There is no doubt that the stock of cattle is, as a rule, in excess of the actual needs of the population in the villages, and that, owing, in many instances, to the diverse reasons for denudation of the face of the country of trees and scrub, the population is too prone to resort to the droppings of their cattle for their fuel supply, instead of reserving them, as is done by the better class of cultivator, for the manure pit. There is also much other material that is similarly allowed to go to waste, and which would be of great assistance to production if it were made use of, as is done in other countries. The first point connotes necessarily the extension of the system of forest reservation to plots devoted exclusively to the supply of fuel and grazing, irrespective of the timber that can be got to grow in them. This is a matter, however, concerning the forest administration of a large number of detached plots in the midst of cultivated land, a point of considerable difficulty in the fully peopled tracts. In connection with the actual crops, it appears that the existing system of rotation is, in most cases, intelligible and based on sound principles, but whether a better cannot be discovered must be left to be determined by the results of prolonged experiment and observation. Dr. Voelcker lays more stress, for the present at all events, on the provision of a better class of seed, a point in regard to

to which the State farms can afford assistance on a scale sufficient to introduce the notion amongst the surrounding peasantry. The general necessity of extending irrigation in the tracts where such aid is required is accompanied by an interesting statement of the relative value in cultivation of the water from canals and from wells. Where the two are found together, the cultivator generally prefers the "warm" water of the well to the "cold" of the larger supply, and it seems that the tillage under wells is more careful, and less likely to cause stagnation from over-watering in the other case. In a recent Note by Sir E. Buck, C.S.I., to whom, as Secretary in the Revenue and Agricultural Department since its reorganisation, many of the recent improvements are due, it is stated that in the area for which annual returns are available, that is, for some 433 millions of acres, there are 76 millions of acres which might be irrigated; and, of these, some 15 millions can be dealt with by wells, towards the construction of which State loans are, to some extent, available. In connection with the question of loans for such purposes, a case is cited in the Panjab, where is a small canal, the construction of which was aided in this manner, in which the profits reached 80 per cent. in five years. There is no want of opportunity for similar enterprise elsewhere, and in the hard times of 1891–92 the system of State advances in the South Deccan resulted in the construction of wells that may literally be counted by hundreds.

Cultivated area.

Leaving now the general subject, we come to the statistics of cultivation prepared under the auspices of the Agricultural Directors of the different provinces. Those for Bengal, it may be stated, are on a different footing from the rest, as in this province the absence of a regular village staff and the proprietary rights of the estate-holders prevent the collection of trustworthy data. The returns, therefore, though they are included with the rest, are only more or less approximately correct. It will be noticed, too, that for a large portion of the Madras Presidency no information is available, for the same reason, and measures are in progress for remedying this want. It is not in Bengal and Madras alone that areas are found for which agricultural statistics are not returned. On comparing the returns with the gross area, as determined by the survey, the two agree in the case of the Panjab, Oudh, Lower Burma, Berar, and Coorg. Bengal, using the estimates just mentioned above, comes within 4 per cent. of identity, and Upper Burma within 9 per cent. Then follow the North-West Provinces, where the difference amounts to about $11\frac{1}{2}$, and Bombay and Sindh, where it is 14 per cent. In the Central Provinces, about 78 per cent. appears in the return, and in Madras, where the large zamindaris, or proprietary estate, are at present exempted from the duty of furnishing statistics, only two-thirds of the area are dealt with. The small province of Ajmer-Merwara contains a considerable area under tenure of a somewhat similar nature, and 45 per cent. of the tract has thus escaped registration. In Assam, finally, survey and revenue operations are by no means widely spread at present, and 46 per cent. is all the area for which the agricultural statistics are available. The marginal table gives the distribution of the net area for which returns are available over the main heads with which this chapter is concerned. The figures are all those for 1891–92, but, to illustrate the difficulty in comparing the returns for years at a considerable interval, owing to the extension of survey, a column has been added showing the area returned as arable waste in 1887–88. In some instances, as in the Panjab and Central Provinces, this area, in spite of the large increase

| Province. | Percentage on Total Area dealt with. | | | | | | |
|---|---|---|---|---|---|---|---|
| | Forest. | Cropped. | Current Fallow. | Waste not available. | Available Arable. | | Irrigate. |
| | | | | | 1891–92. | 1887–88. | |
| Madras - - - | 18·59 | 37·10 | 11·18 | 19·79 | 13·34 | 14·3 | 25·8 |
| Bombay - - - | 10·87 | 39·61 | 13·21 | 24·96 | 11·35 | 12·1 | 11·6 |
| Bengal - - - | 4·88 | 56·65 | - | - | - | - | - |
| North-West Provinces | 11·03 | 53·19 | 4·76 | 14·14 | 16·88 | 16·9 | 29·1 |
| Oudh - - - | 3·69 | 57·50 | 3·27 | 14·35 | 21·19 | 21·7 | 29·8 |
| Panjab - - - | 4·72 | 29·61 | 10·06 | 17·95 | 37·66 | 36·2 | 38·2 |
| Central Provinces - | 28·21 | 36·09 | 4·92 | 9·05 | 21·73 | 17·4 | 4·4 |
| Assam - - - | 19·48 | 12·14 | 5·07 | - | - | - | - |
| Lower Burma - - | 10·48 | 9·24 | 0·86 | 50·49 | 33·01 | 41·8 | - |
| Upper Burma - - | 6·40 | 5·14 | 3·59 | 52·70 | 35·57 | - | 21·7 |
| Total - - - | 12·5 | 31·1 | 7·2 | 25·8 | 23·4 | 23·1 | 20·4 |

increase in the acreage under crops, is shown as actually greater in proportion than it was five years ago, and for the whole of India, excluding Bengal, the relative figure remains the same. In connection with this point, too, it must be repeated that where the area of waste-arable land is considerable, it is often, we may even say usually, inferior in fertility to that already under the plough. In some important tracts this is not so. Burma and part of the "Ceded" tract in Madras, may be cited as cases in point, and probably the submontane land in the east of the North-West Provinces and Oudh is in need only of careful clearing and tillage for a few years to be as productive as that below it in the plains; but confining the remark to the waste land lying well within the open or settled country, and excluding tracts reserved as forest, the rate of assessment per acre, where, as under the Bombay and Madras system, it is recorded on such land at the settlement, shows that so far as the State appreciation of its value is concerned, the new comer will have to put up with soil inferior to that taken into occupation by his predecessors. The deficiency in such cases can only be made up, though to a considerable extent, by the freer use of manure, the extension of irrigation that must accompany it, and the double-cropping that is beginning to grow more prevalent, when the other two means of increasing the productiveness of the soil are within reach. The question of current fallows also enters prominently into the discussion of this table, and the difference between the Provinces in this respect is very remarkable. A good deal is to be set down, doubtless, to the relative accuracy of the return, or, as in Sindh, to the local system of revenue-settlement, but the practice itself differs greatly according to soil and tradition. In rice-growing tracts there is little land left fallow. Where pasture land is growing scarce, there is a good deal. In the lighter soils of the Deccan, the local system of occupancy permits of frequent abandonment and resumption after a sufficient interval of land which would otherwise be retained continuously in the peasant's own hands, though not cropped every year. It is not necessary to say much here regarding irrigation. The table shows that it is much more prevalent in Upper India than in Bombay and the central tracts, and that in Madras, again, the State works in the three great Deltaic tracts of the Godavari, Krishna, and Káwari, account for a great portion of the area thus treated. The distinction is, of course, that in the latter tracts, irrigation renders possible the growth of a more prolific crop, such as rice, whereas in the dryer tracts to the north, without irrigation the naturally fertile soil would be useless, as the young crop would not survive. In Bombay the proportion irrigated is high in Sindh only, where the inundation is utilised. In the Deccan the canal system is being extended, though the water supply is affected by the same influence as the harvest, and rises or falls with the periodic rains, instead of being independent of them, as in the case of the snow-fed streams of Upper India. The larger reservoirs, however, that have been constructed of late years are usually of sufficient capacity to store enough water for considerably more than the season's consumption. In Upper Burma efforts are being made in the same direction. Lake or tank irrigation, as it is termed, is a special feature of the Madras Presidency, on a large scale, and in Oudh on a smaller. The possibility of extending it is a matter under the consideration of the agricultural authorities, as, though it is a system that depends for its success on hydrographic engineering, professional attention has, for obvious reasons, been hitherto directed towards more general schemes in the tracts where the latter are practicable, and under its fostering care, canal irrigation has increased in area by 42 per cent. in the last decade. The area under forest, again, is a point that will be treated of in the ensuing chapter, though it may be noted that, except in the well-defined timber-growing tracts, the establishment of reserves for fuel or grazing necessarily entrenches, to some extent, on the arable waste. As to the waste shown in the table as not available for cultivation, which reaches in some cases half the total area, a good part of the local variation in the proportion must be attributed to differences in the system of record. It includes, for example, such areas as tillage sites, in some provinces, reserved village commons in others; in a third, the beds of large rivers contribute towards it, whilst elsewhere the beds of tanks and land occupied by public groves are thus treated.

Attention may now be restricted to the cropped area only, in regard to which the

the first point to notice is the extent to which the land is made to yield more than one crop in the year. The marginal figures relate to the year 1891–92, but there is no doubt that in some provinces the return is far more complete than in others. The supremacy of the North-West Provinces and Oudh in this respect is very marked. Agricultural inquiry has been organised there for some years longer than anywhere else, and the result is seen in the higher return. At the same time, it is an ascertained fact that in those provinces, especially in the vicinity of towns, what with better manuring and the extension of irrigation from wells and canals, the area thus laid under contribution more than once in the twelvemonth was increased in 10 years from one-tenth to one-fifth of the entire cultivated area, the latter, if the whole of the combined provinces be taken into consideration, having remained almost stationary. It is unreasonable to expect that in the rest of the country the practice will obtain the same currency as in the tracts which have been called the "Garden of India," but in a few years no doubt the returns will be very different from what they are now, and the change will not be on paper only.

| Province. | Percentage on Total Land Cropped more than once. |
|---|---|
| Madras | 8·90 |
| Bombay | 1·73 |
| Sindh | 7·99 |
| Bengal | 12·7 |
| North-West Provinces | 16·81 |
| Oudh | 23·83 |
| Punjab | 10·12 |
| Central Provinces | 9·01 |
| Assam | 9·56 |
| Lower Burma | 0·01 |
| Upper „ | 5·12 |
| Total | 10·9 |

The next topic is the crop distribution, of which a general notion can be obtained from the marginal abstract, from which the figures for Bengal in the last year quoted are excluded, in order to allow of the inter-comparison of the three. The series is remarkably even, as is only to be expected when dealing with such large numbers collected from so wide and diversely conditioned an area. The year 1891–92, however, was in some respects exceptional, as the partial failure of rain in the South Deccan reduced materially the acreage under cotton. Indigo, too, showed a notable falling off, but in the case of cereals, the short early crop of one part of the country was balanced by the large area put under the winter harvest, which the excess of rain in part of Upper India rendered profitable. It will be noticed that pulse is not distinguished from cereals in this classification, because, though the custom is not uniform in this respect, over a large portion of the country the two are sown in alternate rows, so that the fields in which this is the case are entered in the returns under the head of both crops combined. It is as well to give the actual acreage, in supplement of the above proportional figures. The marginal table, accordingly, does this. The falling off in the total area in the last years, as compared with that of two years before is chiefly in fibres, that is, cotton and indigo. The latter is grown in Bengal to an extent exceeding the return from all the rest of India,

| Class of Crop. | Percentage on Total Cropped Area. | | |
|---|---|---|---|
| | 1887–88. | 1889–90. | 1891–92. |
| 1. Cereals and Pulses | 82·02 | 81·39 | 81·63 |
| 2. Oilseeds | 5·07 | 5·23 | 5·66 |
| 3. Fibres | 6·51 | 7·14 | 6·12 |
| 4. Sugar cane | 1·23 | 1·08 | 1·30 |
| 5. Indigo, &c. | 0·62 | 0·65 | 0·36 |
| 6. Tea, Coffee, Tobacco, &c. | 0·49 | 0·52 | 0·49 |
| 7. Other Food Crops | 2·17 | 2·23 | 2·86 |
| 8. Other Non-food Crops | 1·89 | 1·76 | 1·58 |

| Crop or Group. | Acres under each Crop (in Thousands). | | |
|---|---|---|---|
| | 1887–88. | 1889–90. | 1891–92. |
| Cereals and Pulse | 118,118 | 122,154 | 122,232 |
| Oilseeds | 7,299 | 7,845 | 8,498 |
| Fibres | 9,370 | 10,718 | 9,160 |
| Sugar cane | 1,769 | 1,629 | 1,940 |
| Indigo | 899 | 977 | 541 |
| Tea | 234 | 252 | 266 |
| Coffee | 118 | 118 | 128 |
| Tobacco | 354 | 393 | 327 |
| Orchard and Garden | — | — | 1,570 |
| Fodder Crops | — | — | 1,758 |
| Miscellaneous | — | — | 3,318 |
| Total | 144,006 | 150,091 | 149,738 |

India, but the crop area of that province is not here included. The same may be said of tobacco and jute, and, as will be shown below, of rice also.

In the following tables will be found a general statement of the area under the chief crops in 1891–92 in their provincial distribution, including Bengal:—

## I.

### TERRITORIAL DISTRIBUTION in ACRES of the CHIEF CROPS, 1891–92.

| PROVINCE. | Gross Area Cropped.* | Crops. | | | | | |
|---|---|---|---|---|---|---|---|
| | | Rice (Oryza Sativa). | Wheat (Triticum Sativum). | Barley (Hordeum Vulgare). | Jawar, Cholam (Sorghum Vulgare). | Bajra-Kambu, Pennisetum Typhoideum. | Ragi (Eleusine Coracana). |
| | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Madras | 24,308,292 | 5,771,182 | 17,665 | 3,527 | 4,867,666 | 2,496,078 | 1,675,805 |
| Bombay | 25,047,650 | 1,617,387 | 1,738,435 | 32,594 | 8,325,040 | 4,837,234 | 679,506 |
| Sindh | 2,945,542 | 682,206 | 418,704 | 23,211 | 432,466 | 696,818 | 1,701 |
| Bengal | 61,247,557 | 36,324,100 | 1,607,800 | — | — | — | — |
| North-West Provinces | 30,209,350 | 4,650,708 | 3,392,213 | 1,657,645 | 460,776 | 431,104 | 317,115 |
| Oudh | 11,694,920 | 2,488,334 | 1,365,184 | 509,119 | 95,801 | 174,577 | 346,305 |
| Panjab | 21,408,657 | 722,511 | 6,767,893 | 1,196,345 | 2,021,522 | 1,509,967 | — |
| Central Provinces | 17,200,995 | 4,292,480 | 3,957,260 | 12,502 | 1,310,552 | 38,129 | 30,003 |
| Berar | 6,675,966 | 22,023 | 887,984 | 66 | 2,179,425 | 70,158 | — |
| Assam | 1,995,553 | 1,207,871 | 49 | — | — | — | — |
| Coorg | 138,785 | 74,295 | — | — | — | — | 1,350 |
| Ajmer | 274,363 | 490 | 9,539 | 39,435 | 63,220 | 17,653 | 7 |
| Manpur Pargannah | 6,635 | 85 | 1,425 | 3 | 2,231 | — | — |
| Burma, Upper | 2,648,378 | 1,012,633 | 17,631 | 430 | 574,294 | 90,230 | — |
| „ Lower | 5,183,394 | 4,662,897 | — | — | — | — | — |
| Total Returning | 210,986,037 | 63,529,202 | 20,181,782 | 3,474,877 | 20,132,993 | 10,361,948 | 3,051,792 |

* Including land cropped more than once.

## II.

| PROVINCE. | Crops. | | | | |
|---|---|---|---|---|---|
| | Maize. | Gram (Cicer Arietinum). | Linseed. | Til, Gingelli (Sesamum Indicum). | Condiments and Spices. |
| | Acres. | Acres. | Acres. | Acres. | Acres. |
| Madras | 34,829 | 121,991 | 31,829 | 521,554 | 276,705 |
| Bombay | 139,636 | 616,959 | 247,758 | 237,632 | 175,020 |
| Sindh | 1,350 | 39,816 | — | 103,601 | 13,312 |
| Bengal | — | — | — | — | 75,600 |
| North-West Provinces | 897,866 | 2,353,849 | 484,588 | 127,585 | 41,855 |
| Oudh | 521,683 | 1,282,553 | 137,369 | 14,682 | 4,057 |
| Panjab | 1,268,899 | 2,705,708 | 33,439 | 142,880 | 23,933 |
| Central Provinces | 44,280 | 691,645 | 1,386,631 | 456,091 | 8,228 |
| Berar | 865 | 222,526 | 364,368 | 139,174 | 21,623 |
| Assam | — | — | — | — | — |
| Coorg | — | 179 | — | 20 | — |
| Ajmer | 66,076 | 2,794 | 79 | 8,180 | 398 |
| Manpur Pargannah | 640 | 392 | 721 | 134 | — |
| Burma, Upper | 179,357 | 29,752 | 275 | 328,418 | 11,364 |
| „ Lower | 2,001 | 70 | — | 52,300 | 353 |
| TOTAL | 3,157,482 | 8,068,234 | 2,687,057 | 2,132,251 | 652,448 |

III.



| PROVINCE. | Crops. | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Cotton. | Indigo. | Sugar Cane. | Orchard and Garden. | Fodder Crops. | Tobacco. | Tea. | Coffee. |
| | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Madras | 1,318,042 | 212,255 | 58,373 | 605,439 | 58,822 | 72,747 | 5,481 | 65,371 |
| Bombay | 2,520,867 | 1,999 | 75,122 | 126,787 | 49,500 | 76,581 | — | 82 |
| Sindh | 101,032 | 7,375 | 3,034 | 32,390 | 15,864 | 9,668 | — | — |
| Bengal | — | 614,500 | 1,155,900 | 219,700 | 30,000 | 618,000 | 147,400 | — |
| North-West Provinces | 1,196,986 | 242,235 | 1,067,297 | 277,550 | 591,659 | 29,874 | 9,374 | — |
| Oudh | 54,789 | 16,864 | 295,497 | 95,947 | 61,320 | 11,402 | — | — |
| Panjab | 500,299 | 58,896 | 363,976 | 45,204 | 727,701 | 43,435 | 9,011 | — |
| Central Provinces | 760,673 | — | 44,570 | 62,041 | 248,399 | 21,506 | 6 | — |
| Berar | 2,241,489 | 79 | 2,655 | 18,096 | — | 20,279 | — | — |
| Assam | 666 | — | 18,473 | 133,572 | — | 35 | 241,586 | — |
| Coorg | — | — | — | 81 | — | 10 | — | 62,167 |
| Ajmer | 38,431 | 7 | 235 | 3,604 | 1,386 | 3 | — | — |
| Manpur Pargannah | 24 | — | 85 | — | — | 2 | — | — |
| Burma, Upper | 110,396 | 1,547 | 944 | 16,133 | 3,497 | 24,884 | 742 | — |
| „ Lower | 16,735 | 51 | 10,071 | 153,661 | 170 | 16,695 | 19 | 28 |
| TOTAL | 8,859,429 | 1,155,808 | 3,096,232 | 1,790,205 | 1,788,318 | 945,121 | 413,619 | 127,648 |

Though the figures for Bengal are only approximations, they are probably accurate enough for the present purpose, whilst to omit them, as will have been seen from the remarks in the preceding paragraph, might lead to misapprehension as to the prevalence of some of the more important items in the return. Generally speaking, the statement carries on its face its own explanation, and a few cursory comments only are required.

Rice.

First, then, as regards cereals and pulses, it will be seen that rice covers more than a third of the total area under these classes of produce, and that 57 per cent. of it lies within Bengal, where it comprises nearly 60 per cent. of the cropped area. In Lower Burma and Assam, the proportion is still higher. It occupies a prominent place, also, in Madras, Coorg, Oudh and the Central Provinces. No province is entirely without it, though in several, such as Berar and Ajmer, its area is insignificant. The grain is the main food of the middle and lower classes throughout the tracts where it is largely grown, and in other parts of India the upper classes use it almost invariably, and one of the indications of the adoption of a higher standard of living in the interior, is an increased importation by road or rail of this article. The figures of the exports from Burma and Bengal will find a place in the chapter on Trade, later on, and in addition to that for the foreign market, a good deal finds its way to the adjacent countries, such as Ceylon and the Straits Settlements. The large shipments to Egypt shown in the marginal table simply mean that the consignments are distributed on arrival at Port Said, according to the temporary demands of Europe.

Exports of Rice not in Husk, 1891-92.

| Chief Importing Countries. | Quantity. |
|---|---|
| | Cwt. |
| United Kingdom | 5,135,167 |
| Ceylon | 4,145,411 |
| Straits Settlements | 4,179,943 |
| South America | 1,796,372 |
| Mauritius | 1,549,228 |
| Arabia | 662,075 |
| Egypt | 10,874,426 |
| Others | 4,397,259 |
| TOTAL | 32,739,881 |

Wheat.

Next to rice comes wheat. This is eaten to a considerable extent in Upper India only, even as it was in the days of Megasthenes' embassy to Chandragupta in B.C. 312. Its importance in the present day is due to its introduction into the European market, to steady prices in London and elsewhere. As will be seen from the return, it is chiefly grown in the Panjab, the North-West and Central Provinces, and Oudh. Elsewhere, but in the two first mentioned tracts, it is destined chiefly for the foreign market, and even in the North-West

it is not largely consumed far south of Rohilkhand. The comparatively large area shown under it in Bengal lies chiefly in Bihar, as the uplands are more suitable to this crop than the heavy and concentrated rainfall of the coasts. We are treating of it here in its agricultural, not its commercial, aspect, so the question of the quantity exported and its annual variations must be left till later. The advantages of its cultivation, however, are such, owing greatly to the foreign demand, and to the gratitude of the crop for careful irrigation, that the area put under it has greatly extended within the last fifteen or twenty years. The only question that arises out of this marked predilection, is whether the export demand is tending to contract, relatively speaking, the area that would, in other circumstances, be assigned to crops that form the habitual food of the rural population. There appear to be no grounds for apprehending that this result will ensue. In the first place, the peasant of the north has found that irrigation benefits wheat in a greater degree than other produce, so where this assistance is available, he reserves wheat for his winter sowing, and puts all the land prepared for autumnal crops under millet and other produce for local consumption. Then, again, it appears from the inland trade returns that in the years when there is a great export of wheat in the north of India, there is no concomitant import of other food grain, but, on the contrary, an outward movement of this also, showing that the export is the result of a generally good harvest, not of an attempt to satisfy a special and extraneous demand. Lastly, there is the fact which need not be ignored, that the peasant proprietor knows his own business, and in the present state of communications is every year getting more into the habit of attending in person the central market or the agents' establishments, to make his own bargain as to the disposal of his crop. These remarks refer to Upper and Western India. As regards the Central Provinces, perhaps, the stimulus to the wheat trade has not been of so healthy a character, but in so far as the provision of the local food supply is concerned it does not appear that the special features in the arrangements between peasant and broker have had any contracting influence.

Wheat Exports.

| Year. | Quantity Exported. |
|---|---|
| | Cwt. |
| 1871–72 - | 637,095 |
| 1874–75 - | 1,073,655 |
| 1877–78 - | 6,373,168 |
| 1881–82 - | 19,901,005 |
| 1884–85 - | 15,849,881 |
| 1887–88 - | 13,538,169 |
| 1890–91 - | 14,320,496 |
| 1891–92 - | 30,306,700 |

Jowar.

We now enter the great fields of the millets and allied grains, which with rice form the chief breadstuffs of the population. The most widely spread is the sorghum, or great millet, the dhurra of Egypt. The area under it is almost identical with that occupied by wheat, but it is more prevalent in the centre and south of India than in the Panjab. In the North-West Provinces this crop is so much grown in combination with pulse of some sort or other, that its actual prevalence is by no means represented by the figures standing opposite it in the table under discussion, but proportionately to the total cereal-area, jowár is more important in Bombay and Berar than elsewhere. It is mostly grown for home consumption, but the marginal table shows that it is occasionally exported to some extent to adjacent countries, and even to Europe, where the scanty rye crop caused a demand a few years back. It is also grown very largely for fodder.

Exports of Jowar and Bajra, 1891–92.

| Chief Importing Countries. | Quantity. |
|---|---|
| | Cwt. |
| Abyssinia - - - | 560,785 |
| Aden - - - - - | 105,472 |
| Egypt - - - - | 94,855 |
| Arabia - - - - | 63,431 |
| Makram - - - - | 12,864 |
| United Kingdom - - - | 451,091 |
| France - - - - | 125,725 |
| Belgium - - - - | 143,619 |
| Others - - - - | 15,040 |
| TOTAL - - | 1,572,882 |

Bajra.

The next kind of millet occupies only half the area returned by its larger relative. Bajra, known also as spiked or bulrush millet, has not the same value as jowar, either as food or forage. It is chiefly found in the Deccan and Panjab. The remark made above in connection with jowar applies, to a less extent, to the growth of bajra in the North-West Provinces. A good deal is grown also in the upland tracts of Sindh, towards the desert.

Ragi.

Amongst still smaller food-grains, the first is that known by its Southern Indian vernacular title of ragi. In the Western Presidency it becomes nagli, and in Upper India, mandwa. Its chief habitat is the Deccan and some parts of the west coast, and, like the rest of its class, it is comparatively hardy, and flourishes on shallow and poor soil. The other grains that resemble it, more

or

or less, in the method of their cultivation and the use made of them, are not separately mentioned in the general returns, but are to be found set forth in the provincial tables. Amongst them may be mentioned (by their botanical names, as the vernacular is nowhere the same), the *Paspalum scrobiculatum*, of which there are about 1,400,000 acres in Madras and Bombay; the *Panicum miliaceum*, with over 1,100,000, and the *P. miliare*, the *Setaria italica*, &c., covering about two million acres between them, both in the south and the north. All these form the basis of the diet of the lower class of cultivator or field labourer in the tracts where they predominate, which are often adapted, also, to the growth of coarse rice, by which the people supplement their food stock.

Pulses.

As regards pulses, it may be remarked, as with reference to millets, that the provincial variety is so great that the general return does not distinguish more than one species, namely, the gram *Cicer arietinum*, which is parched and eaten everywhere in Northern and Central India. It is also the principal horse food in those regions and in the west, and altogether eight millions of acres are returned under it. In the south it gives place to *Kulthi*, or horse gram, *Dolichos biflorus*, of which about $1\frac{3}{4}$ million acres are returned in Madras and South Bombay. Pulses, however, are a more distinctive feature in the agriculture of the Panjab and North-West Provinces than in that of the Peninsula. In the former, field-peas and smaller pulse cover about two millions of acres, and in the neighbouring province with Oudh, they are returned for about the same area. There is also the arhar, *Cajanus indicus*, called Tur in Bombay, which furnishes, with gram and lentils, *erva lens*, most of the *dal*, or more sustaining food of the masses throughout India, and is the crop generally mixed with cereals in sowing wheat and the larger millets in Upper India, and is also found, though to a less extent, in combination with other crops.

Other food-grains, &c.

The $40\frac{1}{4}$ millions of acres that appear under the head of miscellaneous cereals and pulses, are distributed over the millets, vetches, lentils, and other crops above-mentioned. There remain some $3\frac{1}{2}$ millions of acres under barley, and nearly the same area under maize. Both these are almost confined to Upper India, though found in small quantities throughout the country, except in the region of heavy rainfall.

Oil seeds.

From the above two classes of produce, we pass on to the oilseeds, of which India presents an equal variety. The return does not specify more than two of these, the Indian sesamum and the linseed, and, owing to the exclusion of Bengal, where the whole class is shown in the aggregate, it is probable that these are not completely represented. Linseed predominates in the Central Provinces and Berar, and covers over half a million of acres in the North-West Provinces and Oudh. Sesamum, again, is much grown in Berar and its eastern neighbour, but is equally popular in Madras, Bombay, and Upper Burma. In Madras, however, the castor plant is more grown, and in Bombay the niger seed (Khurásani) equals, and the safflower exceeds, it in the area occupied. In Upper India, again, rape, mustard, and colza are all grown in much larger quantities than elsewhere, whilst in the south, the ground-nut, *Arachis hypogea*, has been brought into comparative prominence as an article of export, by the demand for it on the Continent of Europe.

Oilseeds Exported.

| Year. | Quantity. |
|---|---|
| | Cwt. |
| 1871–72 | 5,125,778 |
| 1875–76 | 10,507,404 |
| 1879–80 | 7,246,182 |
| 1881–82 | 10,482,612 |
| 1885–86 | 17,319,898 |
| 1889–90 | 15,798·271 |
| 1891–92 | 19,165,688 |

Fibres.

Of fibres, the two most important are cotton and jute. The latter is almost confined to North and Eastern Bengal, and the southern parts of Assam. Cotton, it appears from the return under review, is found all over India, as was the case in the time of Herodotus and of Megasthenes after him, but its varieties are extremely numerous, and its lineage equally dubious. Since the remarkable stimulus given to its production by the stoppage of the American supplies between 1861 and 1865, many endeavours have been made to introduce the very best kinds of plant, and in several parts of the country the general quality has been greatly improved, but the tendency to degenerate is very marked, and hybridisation seems almost to be the inevitable rule rather than an exception. Berar and the extreme north and south of the Bombay Presidency, excluding Sindh, furnish the best staples, but much cotton of short fibre is grown for local use in Madras, the Deccan and in the North-West Provinces.

AGRICULTURE AND METEOROLOGY.

Upper Burma, too, produces a good deal, compared to the total area under tillage there. But in Bombay the area under it reached 10 per cent. even in the bad season of 1891–92, and is usually considerably in excess of that proportion. The Berar cotton covered over a third of the cropped area, or about the same as that of jowar, the main food crop. In addition to the area under this product in British territory the Protected States return an estimated area of 9,000,000 acres. The total outturn of cleaned cotton is given in a special return as just under 9,000,000 of pounds, about half a million below the figures quoted in the corresponding table for the preceding year. The quantities set down, however, are not much better than rough estimates. A good deal of the produce moves about, however, as the rail or sea-borne trade returns show. For instance, three and a-quarter million cwt. entered the Bombay Presidency, and five millions left it. Berar exported 1,353,000 cwt., with but insignificant imports. Bengal, on the contrary, imported more than left the province, whilst Madras exported 750,000 cwt. more than was sent into it from other parts of India. The general course of the foreign trade in this fibre is shown in the following table:—

| Year. | Total Exports. | Value of Raw Cotton sent to each Country. | | | | |
|---|---|---|---|---|---|---|
| | | United Kingdom. | Germany. | Austria. | France. | Belgium. |
| | Cwt. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1871–72 | 7,225,411 | 15,079,491 | 248,734 | 934,985 | 2,434,027 | 192,250 |
| 1874–75 | 5,600,086 | 10,576,416 | 177,324 | 983,466 | 2,109,731 | — |
| 1877–78 | 3,460,568 | 3,827,519 | 292,803 | 1,131,162 | 1,713,153 | 47,870 |
| 1881–82 | 5,629,544 | 7,244,942 | 623,081 | 1,741,560 | 1,634,539 | 384,084 |
| 1884–85 | 5,069,713 | 5,590,448 | 231,950 | 1,555,420 | 1,528,043 | 1,418,818 |
| 1887–88 | 5,374,856 | 5,782,421 | 325,785 | 1,890,757 | 1,337,678 | 1.825,355 |
| 1890–91 | 5,924,987 | 4,352,815 | 2,219,055 | 2,014,735 | 1,989,319 | 2,517,769 |
| 1891–92 | 4,429,679 | 1,634,845 | 1,801,752 | 1,372,567 | 1,290,369 | 1,627,295 |

The consumption in the Bombay mills, again, is a matter of some interest in connection with the demand for the raw material. The returns show that in 1881–82 the 49 spinning and weaving concerns in that province consumed about 1,102,340 cwts. of raw cotton, including the supply imported from Persia. In 1891–92 the corresponding return shows a consumption of 2,973,200 cwts. by 87 mills, so that the business done has apparently increased more than the number of new establishments set to work. The number of these mills in the rest of India amounts to 40 only, and in no province are there more than 10.

Narcotics, stimulants, &c.

The next group of produce with which the return deals is that containing what may be generally called stimulants and narcotics. Of these the largest in the record in point of area is tobacco, which is grown in all parts of India, and, as was stated in the preceding chapter, generally in small patches near the village site. In a few tracts the cultivation is on a larger scale, and is undertaken commercially.

Tobacco.

The Southern Indian tobacco fields of Dindigul and the neighbourhood produce the well-known "Trichies," a class of smoke that is now very different from what was known by that name twenty years ago. In the Kaira and Belgaum districts of Bombay, too, there are 20,000 acres respectively under the weed, and in Burma, too, it is much grown, though not in large fields. Bengal shows over 600,000 acres under tobacco, scattered all over the plains, though the largest areas are found in Nadia and Rangpur. In by far the majority of cases, the cultivation is either for family consumption or for sale at the shop of the producer in the village in which the land is situated. A good deal of trouble has been taken within the last decade or so to improve the quality of the leaf grown for commerce, and the experiments with Java and other stocks have been fairly successful. The curing process, however, has been, in some cases, hardly as efficient as could be wished, but it was an innovation to which the Indian preparer of tobacco was unaccustomed, and is only now taking root.

Coffee

Coffee.

Coffee is probably not indigenous to India, but, like opium, was introduced by the Arabs to the Malabar coast. It is now grown only in the Nilgiris, the Wainad, and Salem, in the Madras Presidency, and in Coorg. There are also some few plantations in the Malabar States of Cochin and Travancore, and a considerable area under coffee in the western portion of the Mysore State. The special return includes areas not dealt with in the general table, so that the entire area under this product appears to be about 420,400 acres. The year before the area was some 9,000 acres above this figure. The decrease was chiefly in the Wainad, where the area is now 63,700 acres, as compared with 9,906 in 1862, and 29,600 acres in 1872. On the other hand, the yield was considerably heavier, and 39,645,000 lbs. are returned, instead of 22,102,000 lbs. from the larger area of 1890-91, and in some cases, such as Mysore and the Malabar States, the output per acre was well-nigh doubled. Coffee planting was introduced into the Wainad in 1840, and into Coorg 14 years later. In both tracts it has experienced many vicissitudes. In Coorg, particularly, the "borer" has wrought much damage of late years, and the native planters—and nearly every well-to-do estate-holder sets aside a few acres for coffee—are said to be negligent in extirpating this pest from their gardens.

Tea.

Tea-planting is carried on chiefly in the Assam Valley, Cachar, the Western Duars, or submontane tract below Darjiling, at Darjiling itself, and in other hill tracts in Eastern India, in Dehra dun and the Kangra Valley in Northern India, and in the Nilgiris in the Madras Presidency. There are a few acres, also, in Upper Burma, but most of the tea consumed in that Province is pickled, and not for decoction, and is prepared from the wild shrubs in Manipur and the Shan hills. The first attempts at regular cultivation were in 1835, the discovery of the plant dating probably from 15 years before. The most prosperous gardens are those of Assam and Bengal. In Dehra Dun and Kumaon there are now some 9,400 acres, and in Kangra a few hundred acres less. Ten years ago the acreage was 9,200, and 3,300 acres respectively. The large area in Assam is cultivated by labour specially introduced from Oudh and Bihar and other tracts in or near Bengal. The details of the arrangements regarding these immigrants will be given in the concluding chapter of this review. The Bengal tea tracts, again, are supplied with labour under certain supervision, but not regulated by enactments. The special tables relating to this product show the acreage in 1891–92 to have been as quoted marginally. The figures do not agree with those in the general return, owing to a difference in the period to which some of them relate. The outturn of tea was approximately 123,712,800 lbs., against 112,036,400 lbs. in 1890, and 99,792,500 lbs. in 1888. In 1872 the Assam yield was returned at 14,760,200 lbs., and in 1891, 90,309,400 lbs. The corresponding figures for Kangra were 428,600 lbs. and 1,831,400 lbs. The hills of the North-West Provinces and Dehra Dun yielded 697,200 lbs. in the first of the two years quoted, and 1,748,300 lbs. in the last. Nilgiri and Travancore tea, in 1888, gave an outturn of 1,549,500 lbs, and in 1892, 2,414,400 lbs. The number of gardens in all India rose from 4,067 in 1888 to 4,293 in 1892. The capital invested in these plantations was estimated in 1891–92 to amount to Rx. 8,640,000. The exportation of this product, again, is an interesting feature in the trade returns. It appears that the exports, as shown in the margin, have been steadily and rapidly rising in the last ten years, whilst the market seems extending more and more beyond the United Kingdom, though this is still by far the best customer. Australia and Persia come next. Five years ago the Straits Settlements were far ahead of Persia in its demand, but little now finds its way there. Canada, too, has taken the place of the United States in this respect.

| PROVINCE. | Acreage in 1891–92. |
|---|---|
| Bengal | 90,815 |
| Assam | 241,823 |
| North-West Provinces | 8,032 |
| Panjab | 8,837 |
| Madras | 11,954 |
| Elsewhere | 669 |
| Total | 362,130 |

| Year. | Exports to United Kingdom. | Total Export. |
|---|---|---|
| | Lbs. | Lbs. |
| 1881–82 | 47,413,576 | 48,691,725 |
| 1883–84 | 59,225,189 | 59,911,703 |
| 1885–86 | 66,640,947 | 68,784,249 |
| 1887–88 | 84,182,275 | 87,514,505 |
| 1889–90 | 98,731,311 | 103,760,104 |
| 1891–92 | 111,168,895 | 120,149,407 |

AGRICULTURE AND METEOROLOGY.

Cinchona.

Cinchona cultivation was introduced into India in 1861, after Mr. Markham's successful expedition to the Andes to investigate the supply there available. Experimental plantations were begun on the Nilgiris. The marginal table shows the present condition of this valuable enterprise. For many years the bark was used in the preparation of a febrifuge alkaloid, and within recent times the preparation of sulphate of quinine has been taken in hand with signal success. The extent of the demand can be appreciated in some degree from the marginal table of approximate outturn. The expenditure on the State plantations was Rx. 23,421, and the receipts, Rx. 18,639. The greater part of the former was on the plantations on the Sikkim concern, which have cost within the last four years between Rx. 15,534 and 18,117 annually, with a production rising from Rx. 10,900 to Rx. 12,900. The distribution of this, the most popular medicine in India, has been much aided in Bengal during the last year by the sale of small packets at the larger post offices in the rural tracts, to the number of 665,000, and it is proposed to extend the system to Assam and Burma. Between 1885 and 1888 the process of isolating pure quinine and other alkaloids from the bark was elaborated by Dr. King and Mr. Gammie, so that pure quinine is now sold at the rate of Rx. 1·67 per lb.

| PROVINCE. | Number of Plants, 1891–92. | | |
|---|---|---|---|
| | Government Plantations. | Private Plantations. | TOTAL. |
| Sikkim | 4,598,971 | — | 4,598,971 |
| Nilgiris | 1,779,894 | 4,493,397 | 6,273,291 |
| Darjiling | — | 1,429,870 | 1,429,870 |
| Salem, &c. | — | 1,842,305 | 1,842,305 |
| Coorg | — | 498,067 | 498,067 |
| Mysore | — | 254,597 | 254,597 |
| TOTAL | 6,378,865 | 8,518,236 | 14,897,101 |

| PROVINCE. | Outturn of Bark in Lbs. | | |
|---|---|---|---|
| | Government. | Private. | TOTAL. |
| | Lbs. | Lbs. | Lbs. |
| Sikkim | 285,860 | — | 285,860 |
| Nilgiris | 53,833 | 664,738 | 718,571 |
| Salem, &c. | — | 754,633 | 754,633 |
| Darjiling | — | 150,000 | 150,000 |
| Coorg | — | 51,506 | 51,506 |
| Mysore | — | 100 | 100 |
| TOTAL | 339,693 | 1,620,977 | 1,960,670 |

Sugar-cane.

Leaving drugs and narcotics, we come to sugar-cane, one of the most lucrative crops in India, but also one which requires remarkable care and experience in cultivation, with more than ordinary irrigation and manuring. Near towns, where there is a large demand for the raw cane, the area under this product is rapidly increasing. The largest areas are returned from the North-West Provinces and Bengal, followed by the Panjab and Oudh. In Southern and Central India the areas are comparatively small, though showing a tendency to increase. In the rural tracts the juice is extracted and boiled on the spot. In one or two places joint establishments on a larger scale have been set to work, as in parts of the West Indies and other sugar-growing islands, but the practice has not yet taken root. Within the last generation, indeed, within, it may be said, the last 10 years, there has been a considerable tendency to substitute for the traditional wooden press a simpler and more efficient article, manufactured by a European planting firm in Bihar, which has had imitations in other parts of India. The quality of the cane, however, is not very high, compared to that of the similar product in Mauritius and elsewhere. The amount of raw cane consumed, however, is very large. In every market town it is sold by the cane, or length, and in the cities, where the refinement is appreciated, portions an inch or two in length are peeled and placed on the stall ready for consumption. The molasses, or jaggary, is mostly consumed in the country; still there is a small export trade, chiefly from Madras, with the United Kingdom, Canada, Arabia, and Egypt.

Area under Sugar-cane, omitting Bengal.

| Year. | Acres in Thousands. |
|---|---|
| 1884–85 | 1,317 |
| 1885–86 | 1,463 |
| 1886–87 | 1,622 |
| 1887–88 | 1,769 |
| 1888–89 | 1,854 |
| 1889–90 | 1,629 |
| 1890–91 | 1,632 |
| 1891–92 | 1,940 |

Indigo.

The only other crop that needs special comment is that of indigo. The plant is said to be of foreign origin, though introduced early in Indian historic times. The dye is in universal use in some parts of India for women's garments, and, though it is grown to some extent in most of the larger provinces by certain classes, it is chiefly found in Bengal, the North-West Provinces, and Madras. The

The trade is almost entirely European in origin and development, and in Madras and North Bihar alone has native cultivation attained any vigour. Though India has almost a monopoly of the production, prices have of late shown a downward tendency, possibly owing, in part, to the competition of substitutes. Taking 1845–50 as an average period, the indigo that fetched Rx. 100 then fetched Rx. 205 in 1880, Rx. 125 in 1889, and Rx. 126 in 1892. The area, however, returned as under this plant only shows a marked falling off, omitting the province of Bengal, for which the returns for 1891–92 alone are to hand, since the year 1890-91, where the decline was general, but more marked in Madras and the Panjab than elsewhere. In 1891-92, it will have been noted, the indigo area in Bengal is considerably in excess of that in the aggregate of the rest of the returning provinces. The Trade Returns show the following variations in the last 20 years :—

| YEAR | Acreage, omitting Bengal. |
|---|---|
| 1884-85 | 897,971 |
| 1885-86 | 907,078 |
| 1886-87 | 812,792 |
| 1887-88 | 890,392 |
| 1888-89 | 908,217 |
| 1889-90 | 977,433 |
| 1890-91 | 683,339 |
| 1891-92 | 541,308 |

| YEAR. | Total Exported. | | Exported to the United Kingdom. | Exported from | | |
|---|---|---|---|---|---|---|
| | Quantity. | Value. | | Bengal. | Madras. | Bombay. |
| | Cwt. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1871-72 | 115,414 | 3,705,475 | 2,392,387 | 2,465,186 | 1,183,715 | — |
| 1873-74 | 115,980 | 3,555,300 | 2,509,715 | 2,628,010 | 874,576 | — |
| 1875-76 | 110,392 | 2,875,065 | 1,823,265 | 2,352,577 | 468,766 | 53,722 |
| 1877-78 | 120,605 | 3,494,334 | 1,494,369 | 3,043,707 | 390,343 | 60,284 |
| 1879-80 | 100,935 | 2,947,434 | 1,490,085 | 1,880,450 | 943,353 | 123,631 |
| 1881-82 | 150,369 | 4,509,189 | 2,415,222 | 3,151,260 | 1,227,836 | 130,094 |
| 1883-84 | 168,590 | 4,640,991 | 2,490,839 | 3,373,181 | 1,153,513 | 114,293 |
| 1885-86 | 132,495 | 3,783,160 | 1,799,727 | 2,559,691 | 1,036,141 | 187,328 |
| 1887-88 | 139,644 | 3,890,649 | 1,543,498 | 2,745,689 | 973,962 | 170,998 |
| 1889-90 | 157,116 | 3,863,084 | 1,617,167 | 2,490,527 | 1,181,134 | 191,423 |
| 1891-92 | 125,329 | 3,214,085 | 995,823 | 2,636,039 | 445,126 | 132,920 |

It is unnecessary to enter into the details of the other entries in the table, though it may be remarked how well orchard and garden produce and miscellaneous food crops, such as vegetables, are represented, so that consideration must be given to their proportion in estimating the food supply of the people. Speaking generally, some 86 per cent. of the area is occupied by food produce, including the wheat and rice grown for the foreign consumer. A statement showing the provincial distribution of the cultivated area amongst the different crops or classes of produce is useful, in supplement of what has been said above regarding the principal component items. On the following page, accordingly, the details, as given in the general returns, are thrown into a proportional form, in order that the different parts of the country may be the more readily compared together.

## PERCENTAGE of each Crop on Gross Area cultivated in 1891–92.

| CROPS. | Madras. | Bombay. | | North-West Provinces. | | Panjab. | Central Provinces. | Berar. | Assam. | Burma. | | Total Returned. | Bengal. | Total, including Bengal. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Bombay. | Sindh. | North-West Provinces. | Oudh. | | | | | Upper. | Lower. | | | |
| A.—Cereals and Pulses: | | | | | | | | | | | | | | |
| Rice | 23·74 | 6·46 | 23·16 | 15·40 | 21·28 | 3·33 | 24·96 | 0·33 | 60·52 | 38·23 | 89·96 | 18·17 | 59·31 | 30·11 |
| Wheat | 0·07 | 6·94 | 14·22 | 11·23 | 11·67 | 31·61 | 23·01 | 13·30 | – | 0·66 | – | 12·40 | 2·63 | 9·57 |
| Barley | 0·01 | 0·13 | 0·79 | 5·49 | 4·35 | 5·59 | 0·07 | – | – | 0·01 | – | 2·32 | – | 1·65 |
| Jowar | 19·20 | 33·24 | 14·69 | 1·53 | 0·82 | 9·44 | 7·62 | 32·65 | – | 21·68 | – | 13·44 | – | 9·54 |
| Bajra | 10·27 | 18·31 | 23·66 | 1·43 | 1·49 | 7·05 | 0·22 | 1·05 | – | 3·41 | – | 6·92 | – | 4·91 |
| Ragi | 6·89 | 2·71 | 0·06 | 1·05 | 2·96 | – | 0·17 | – | – | – | – | 2·03 | – | 1·45 |
| Maize | 0·14 | 0·55 | 0·05 | 2·97 | 4·46 | 5·03 | 0·26 | 0·01 | – | 6·77 | 0·04 | 2·17 | – | 1·50 |
| Grain | 0·50 | 2·46 | 1·35 | 7·79 | 10·97 | 12·64 | 4·02 | 3·33 | – | 1·12 | – | 5·38 | – | 3·82 |
| Others | 20·23 | 9·75 | 5·67 | 37·56 | 31·77 | 9·86 | 16·77 | 5·40 | 3·81 | 5·73 | 0·29 | 18·83 | 19·66 | 19·08 |
| TOTAL A. | 81·05 | 81·55 | 83·65 | 84·45 | 89·77 | 85·50 | 77·10 | 56·07 | 64·33 | 77·61 | 90·29 | 81·66 | 81·60 | 81·63 |
| B.—Oilseeds: | | | | | | | | | | | | | | |
| Linseed | 0·13 | 0·99 | – | 1·60 | 1·18 | 0·16 | 8·06 | 5·45 | – | 0·01 | – | 1·79 | – | 1·27 |
| Sesamum | 2·15 | 0·95 | 3·52 | 0·42 | 0·13 | 0·67 | 2·65 | 2·08 | – | 12·40 | 1·00 | 1·42 | – | 1·01 |
| Others | 3·90 | 4·09 | 6·58 | 0·49 | 0·64 | 3·29 | 1·71 | 1·54 | 9·40 | 0·02 | 0·03 | 2·45 | 7·12 | 3·81 |
| TOTAL B. | 6·18 | 6·03 | 10·10 | 2·51 | 1·95 | 4·12 | 12·42 | 9·07 | 9·40 | 12·43 | 1·03 | 5·66 | 7·12 | 6·09 |
| C.—Fibres: | | | | | | | | | | | | | | |
| Cotton | 5·42 | 10·06 | 3·43 | 3·96 | 0·47 | 2·34 | 4·42 | 33·58 | 0·05 | 4·17 | 0·32 | 5·92 | – | 4·20 |
| Jute and others | 0·30 | 0·32 | 0·02 | 0·22 | 0·13 | 0·39 | 0·12 | 0·18 | 0·02 | 0·01 | 0·01 | 0·20 | 3·42 | 1·14 |
| TOTAL C. | 5·72 | 10·38 | 3·45 | 4·18 | 0·60 | 2·73 | 4·54 | 33·76 | 0·07 | 4·18 | 0·33 | 6·12 | 3·42 | 5·34 |
| D.—Sugar-cane | 0·24 | 0·30 | 0·10 | 3·53 | 2·53 | 1·70 | 0·26 | 0·04 | 0·90 | 0·03 | 0·20 | 1·30 | 1·89 | 1·48 |
| Condiments and Spices | 1·14 | 0·50 | 0·45 | 0·14 | 0·04 | 0·11 | 0·05 | 0·32 | – | 0·43 | 0·01 | 1·18 | 0·13 | 0·30 |
| Orchard and Garden produce | 2·49 | 0·45 | 1·64 | 0·92 | 0·82 | 0·21 | 0·36 | 0·27 | 6·70 | 0·61 | 2·97 | 1·05 | 0·36 | 0·85 |
| Fodder Crops | 0·24 | 0·18 | 0·08 | 1·96 | 0·52 | 3·40 | 1·44 | – | – | 0·13 | – | 1·17 | 0·05 | 0·85 |
| E.—Tobacco | 0·30 | 0·31 | 0·33 | 0·10 | 0·10 | 0·20 | 0·12 | 0·30 | – | 0·94 | 0·31 | 0·22 | 1·00 | 0·45 |
| Tea | 0·02 | – | – | 0·03 | – | 0·04 | – | – | 12·11 | – | – | 0·18 | 0·24 | 0·20 |
| Coffee | 0·27 | – | – | – | – | – | – | – | – | – | – | 0·09 | – | 0·06 |
| F.—Indigo, &c. | 0·87 | – | 0·03 | 0·80 | 0·14 | 0·28 | – | – | – | 0·06 | – | 0·36 | 1·00 | 0·56 |
| G.—All others | 1·48 | 0·30 | 0·17 | 1·38 | 3·53 | 1·71 | 3·71 | 0·17 | 6·49 | 3·58 | 4·86 | 1·01 | 3·19 | 2·19 |

The table speaks for itself. It will be seen that no single crop holds an extensive tract of country to the same extent as rice does Assam, Bengal, and Lower Burma. The nearest approach to its prevalence is that of wheat in the Panjab, and the greater millet in Bombay and Berar. The high proportion of miscellaneous cereals and pulses in the North-West Provinces, Oudh, and Madras is due to the remarkable number of small millets not separately distinguished, and also to the same feature amongst the pulses which, in the two first named, are sown with them, as well as with wheat and the larger grain. The peculiar distribution in Berar should also be noticed, since, excluding the wheat, which is grown for export, only 43 per cent. of the cultivated area is devoted to the chief food-grains, and the rest to lucrative commercial produce, such as oilseeds and cotton. More will be said on this point in the concluding chapter of this review.

Prices of Agricultural Produce.

The last topic in connection with agriculture that it is proposed to treat of here is that of the course of prices of agricultural produce. The subject is, necessarily, one of great complexity if the attempt be made to analyse the separate returns, and to assign to each of the general causes affecting these prices its approximate value in relation to the rest. The effect of railways, for instance, considering the extension of the larger systems that was a marked feature of the last 10 years, must have been to equalise prices, or to have had, at least, a very considerable influence in that direction, taking the country as a whole; but their effect on special interests is very diverse, according to the predominating produce that is offered for transport. In tracts which had hitherto been secluded from participation in the general movement of such commodities, prices have gone up rapidly, on account, probably, of the fresh markets opened by the railway; but this cannot be said of prices in the region previously within reach of the means of ready sale. Then, again, there has to be considered the possible effects of variation in the exchange value of the current coinage, and the great extension of that coinage, all of which are factors of the highest importance in the question, but which it is not within the province of this review to attempt to dissect.

The return now presented deals with the retail prices of the chief agricultural products at the markets at which those products are in demand as the staple food of the surrounding population, or in the case of wheat, as the chief food-grain of foreign trade. Instead, however, of showing each of these separately, when the market deals largely in more than one, it has been thought advisable to show the general course of prices at the market, by combining all the items selected. In order to do this correctly, the first step was to reduce the variations to a given base. This has been taken as the mean price of each product between 1880 and 1885, a period within which there was no general or widespread disturbance of agricultural conditions. Thus, the mean annual prices from 1861 downwards are shown, in the first instance, in their relation to those ruling during the five years above mentioned. It should next be explained that the general ratio for the individual market is the geometrical mean of the ratios of the price of each product for the year. This has been selected in place of the more simple arithmetical mean because it equalises better the results of large fluctuations. For example, one commodity has doubled in price, whilst another, with which it has to be combined, has gone down to one-half. The original price of each being taken as 100, the former would be represented by 200, and the latter by 50. The arithmetical mean $(\frac{200+50}{2})$ would show a rise on the two together of 25 per cent., but the use of the geometrical mean $(\sqrt{200 \times 50})$ proves that there has been no variation whatever, the proportional rise of one being set off against the proportional fall of the other. It is unnecessary to supplement this explanation with examples from the tables before us, but where the difference in the course of the prices of the products has been considerable, that between the two means is sufficiently marked to justify the mathematical refinement.

AGRICULTURE AND METEOROLOGY.

TABLE showing the Ratio of the Aggregate Prices of AGRICULTURAL PRODUCE to the Mean Price between 1880 and 1885, and the same Ratio in the case of Bullion and Exchange.

| YEAR. | Patna. 3. | Cawnpore. 7. | Delhi. 5. | Rawal Pindi. 5. | Kárachi. 5. | Faizabad. 5. | Ahmadnagar. 4. | Jabalpur. 5. | Raipur. 3. |
|---|---|---|---|---|---|---|---|---|---|
| 1861 | 73·61 | 116·56 | 139·74 | 89·16 | 68·79 | 84·10 | 75·00 | 101·49 | 56·62 |
| 1862 | 77·58 | 83·09 | 67·77 | 69·91 | 77·17 | 78·28 | 107·97 | 81·40 | 38·40 |
| 1863 | 56·96 | 71·46 | 67·47 | 69·01 | 73·18 | 74·87 | 152·42 | 102·50 | 51·11 |
| 1864 | 70·91 | 107·73 | 83·29 | 78·78 | 127·10 | 97·86 | 158·57 | 97·56 | 90·40 |
| 1865 | 104·50 | 126·91 | 94·99 | 84·83 | 140·01 | 128·42 | 110·41 | 119·32 | 123·81 |
| 1866 | 152·17 | 138·03 | 87·91 | 100·40 | 110·00 | 150·28 | 124·86 | 180·53 | 179·91 |
| 1867 | 100·39 | 107·52 | 97·98 | 100 95 | 88·28 | 85·89 | 140·94 | 118·48 | 115·91 |
| 1868 | 66·37 | 92·03 | 96·38 | 185·59 | 92·26 | 104·68 | 89·16 | 142·55 | 103·32 |
| 1869 | 131·13 | 170·85 | 175·50 | 189·45 | 100·03 | 154·36 | 128·98 | 191·40 | 208·11 |
| 1870 | 107·89 | 121·79 | 117·85 | 140·18 | 130·09 | 122·54 | 136·81 | 157·00 | 139·36 |
| 1871 | 91·76 | * 95·86 | 90·32 | 115·47 | 113·64 | † 83·73 | ‡ 112·15 | † 105·26 | 86·90 |
| 1872 | 97·50 | * 104·32 | 97·91 | 114·82 | 97·34 | 117·85 | ‡ 121·18 | 120·08 | 80·60 |
| 1873 | 121·12 | 121·05 | 96·37 | 112·59 | 86·76 | 125·14 | 95·11 | 114·51 | 76·19 |
| 1874 | 128·99 | 125·21 | 97·08 | 92·62 | 89·91 | 132·03 | 66·57 | 120·76 | 77·95 |
| 1875 | 86·96 | 94·47 | 88·14 | 80·62 | 92·71 | 86·71 | 71·71 | 88·79 | 71·01 |
| 1876 | 92·11 | 78·54 | 73·89 | 69·64 | 99·67 | 71·89 | 94·13 | 88 04 | 66·22 |
| 1877 | 108·34 | 121·56 | 93·22 | 87·69 | 122·44 | 110·22 | 187·49 | 119·98 | 75·09 |
| 1878 | 146·02 | 181·68 | 146·20 | 154·76 | 160·79 | 162·26 | 206·07 | 196·22 | 162·32 |
| 1879 | 142·18 | 149·67 | 134·60 | 246·03 | 155·86 | 140 84 | 203·69 | 173·47 | 156·56 |
| 1880 | 104·76 | 107·29 | 104·19 | 204·67 | 119·42 | 110·52 | 137·04 | 113·06 | 124·54 |
| 1881 | 83·89 | 100·60 | 101·80 | 160·61 | 95·87 | 93·99 | 79·95 | 90·81 | 79·38 |
| 1882 | 92·58 | 99·29 | 98·97 | 101·67 | 96·20 | 99·19 | 91·15 | 104 38 | 83·42 |
| 1883 | 106·65 | 97·45 | 97·32 | 76·36 | 97·21 | 98·41 | 101·89 | 100·02 | 103·56 |
| 1884 | 121·78 | 96·23 | 98·22 | 62·96 | 95·44 | 99·83 | 109·35 | 95·82 | 115·55 |
| 1885 | 109·53 | 94·05 | 80·25 | 70·62 | 95·02 | 92·60 | 111·81 | 98·72 | 112·43 |
| 1886 | 101·92 | 100·46 | 94·50 | 100·14 | 103·67 | 96·00 | 110·81 | ‡ 125·52 | 126·82 |
| 1887 | 99·35 | 112·70 | 127·99 | 153·63 | 112·01 | 123·78 | 107·40 | ‡ 135 47 | 143·56 |
| 1888 | 116·24 | 128·64 | 127·76 | 153·01 | 115·74 | 143·74 | 121·88 | ‡ 141·11 | 154·22 |
| 1889 | 133·19 | 116·26 | 108·94 | 105·92 | 113·26 | 135·35 | 126·89 | ‡ 147·07 | 170·58 |
| 1890 | 124·48 | 125·79 | 122·49 | 99·82 | 106·56 | 139·94 | 101·18 | ‡ 139·74 | 149·04 |
| 1891 | 124·43 | 139·45 | 137·66 | 138·07 | 114·31 | 161·33 | 97·74 | ‡ 155.76 | 149·38 |
| 1892 | 141·94 | 125·99 | 114·39 | 156·78 | 125·10 | 135·24 | 129·10 | ‡ 153·49 | 106·54 |

Standard.

* 5 and 6 products. † 4 products. ‡ 3 products.

TABLE showing the Ratio of the Aggregate Prices of Agricultural Produce, &c.—*continued.*

| YEAR. | Bellary. 4. | Salem. 4. | Ahmadabad. 7. | Bakkargunge. 1. | Rangoon. 1. | Toungoo. 1. | Price of Australian Gold (Calcutta). | Price of Bar Silver (London). | Exchange on London. |
|---|---|---|---|---|---|---|---|---|---|
| 1861 | 119·29 | 126·46 | 113·00 | 80·93 | 120·50 | 91·92 | 86·97 | 119·30 | 125·24 |
| 1862 | 116·20 | 124·46 | 114·22 | 87·54 | 80·31 | 104·16 | 87·30 | 118·82 | 122·15 |
| 1863 | 137·81 | 110·44 | 159·19 | 95·14 | 80·31 | 82·22 | 86·63 | 120·52 | 122·15 |
| 1864 | 219·12 | 100·57 | †224·54 | 101·17 | 90·44 | 74·40 | 83·27 | 119·79 | 133·26 |
| 1865 | 220·29 | 122·81 | 200·22 | 107·78 | 90·44 | 86·78 | 84·62 | 119·55 | 125·85 |
| 1866 | 245·67 | 155·83 | 150·42 | 215·56 | 80 31 | 107·72 | 87·30 | 118·57 | 126·47 |
| 1867 | 301·05 | 211·98 | 144·72 | 109·93 | 100·37 | 120·17 | 85·29 | 117·64 | 119·07 |
| 1868 | 158·52 | 154·56 | 145·35 | 119·47 | 100·37 | 97·66 | 85 29 | 118·09 | 115·06 |
| 1869 | 109·77 | 135·45 | 196·81 | 123·22 | 110·43 | 91·92 | 86·29 | 117·84 | 118·14 |
| 1870 | 110·69 | 113·43 | 185·47 | 103·86 | 120·50 | 100·78 | 87·30 | 117·84 | 118·45 |
| 1871 | *87·55 | *63·16 | †135·59 | 110·82 | — | — | 90·66 | 117·84 | 113·51 |
| 1872 | 100·98 | 65·53 | †105·55 | 84·04 | 78·01 | 60·71 | 90·66 | 118·09 | 119·68 |
| 1873 | 110·44 | 100·02 | 105·97 | 90·45 | 98·59 | 60·82 | 89·65 | 116·38 | 116·44 |
| 1874 | 101·19 | 109·79 | 98·69 | 154·50 | 125·96 | 71·38 | 91·67 | 112·97 | 114·01 |
| 1875 | 117·31 | 100·33 | 89·41 | 118·01 | 84·43 | 79·98 | 88·65 | 112·00 | 112·59 |
| 1876 | 163·59 | 133·99 | 95·07 | 118·07 | 80·31 | 79·11 | 91·33 | 106·89 | 108·42 |
| 1877 | 303·95 | 299·18 | 158·62 | 153·78 | 93·87 | 105·08 | 91·33 | 111·51 | 111·20 |
| 1878 | 241·87 | 216·39 | 200·44 | 191·47 | 120·72 | 91·67 | 94·02 | 104·94 | 104·11 |
| 1879 | 169·07 | 157·27 | 179·38 | 188·66 | 125·14 | 119·82 | 100·73 | 96·66 | 98·09 |
| 1880 | 114·15 | 126·70 | 99·44 | 113·43 | 107·58 | 109·77 | 97·71 | 101·89 | 101·79 |
| 1881 | 91·90 | 96·93 | 83·57 | 76·41 | 96·10 | 86·11 | 100·06 | 100·31 | 99·32 |
| 1882 | 98·85 | 96·20 | 109·79 | 85·85 | 90·74 | 79·98 | 100·06 | 101·04 | 102·25 |
| 1883 | 90·57 | 88·97 | 109·02 | 109·41 | 103·09 | 107·65 | 101·41 | 97·88 | 97·47 |
| 1884 | 109·78 | 98·56 | 106·07 | 136·78 | 104·05 | 133·38 | 100·73 | 98·85 | 99·17 |
| 1885 | 122 44 | 120·94 | 98·54 | 157·66 | 88·75 | 130·78 | 106·78 | 97·39 | 97·93 |
| 1886 | 112·72 | 111 00 | 103·36 | 143·57 | 93·94 | 130·67 | 114·50 | 90·45 | 90·38 |
| 1887 | 102·68 | 94·35 | 123·40 | 120·15 | 102·69 | 141·14 | 115·51 | 90·33 | 89·99 |
| 1888 | 101·33 | 99·08 | 128·39 | 126·39 | 108·45 | 169 94 | 122·22 | 86·80 | 86·06 |
| 1889 | 109·64 | 103·52 | 128·28 | 171·71 | 108·54 | 134·45 | 126·25 | 83·15 | 83·28 |
| 1890 | 112·05 | 108·81 | 120·02 | 165·09 | 111·82 | 125·39 | 123·23 | 85·95 | 86·56 |
| 1891 | 128·18 | 135·81 | 122·67 | 146·29 | 121·71 | 138·23 | 111·48 | 93·74 | 93·00 |
| 1892 | 174·41 | 162·52 | 125·93 | 200·78 | 126·80 | 149·46 | 123·23 | 84·85 | 83·90 |

* 3 products.

† 6 products.

AGRICULTURE AND METEOROLOGY.

One of the most important produce markets in India is Cawnpore, which may therefore be taken in illustration of the bearings of the table. Here there are no less than seven commodities to be considered before we can see whether the prices at this centre have gone up or down. The seven are rice, wheat, barley, gram, jowar, bajra and arhar, or five cereals and two pulses. The base-line, that is, the mean prices ranging between 1880 and 1885, is derived from a rather wide series of fluctuations, namely, from 96¼ to 107¼. The series starts in 1861 with a price 16½ per cent. above the quinquennial mean as above described, as there was scarcity over the North-West Provinces in that season. Next year, however, the prices fell to nearly 17 per cent. below the standard, and in the year after to 28½ per cent. in the same direction. The years of severe drought are well marked by rises of nearly 71 per cent. in 1869, and of 81⅜ in 1878. The normal was reached in 1881, and a period followed of five years of prices a little below the standard. Since 1887, however, rates have been continuously above to the extent of from 12¾ in that year to 39½ per cent. in 1891. Take Raipur, again, as an example of the tract opened within recent years by the construction of the Bengal-Nagpur line. The first 20 years of the period show only exceptional and temporary leaps above the standard, but from 1878 downwards the rise has been well sustained. It may be noticed that in 1877, whilst prices had more than doubled in Ahmadnagar, one of the Deccan famine-stricken districts, and in Bellary and Salem were standing at thrice the standard rate, in Raipur they were 25 per cent. below the latter. On the other hand, in 1891 and 1892 railways connected the two tracts, that of plenty and that of dearth, and prices rose but little compared with the enormous fluctuations of the preceding time of scarcity. In the local reports on the season, some of which will be cited in the last chapter of this review, many instances are given of the equalizing influence of the present improved means of communication. The only point that remains to be noted is the general rise in markets taken from all parts of the country within a period varying from six to 10 years, from 1891–92. The upward movement is, of course, anything but uniform in degree, but in no place is there a tendency in the opposite direction. It is not suggested that the prices here dealt with are those which the peasant receives for his produce, but the difference is not sufficient, especially now that the producer deals direct with the purchaser, to obliterate all the advantage of so large an increase.

Leaving now the agricultural produce, we may pass to the columns treating of the fluctuations in the price of bullion in Calcutta and London, with the course of exchange, which is reproduced here, though in a different form, from what has been already given in the chapter on Finance. From 1881 downwards it tells its own story, but it is by no means certain how far the fall in the gold price of silver, or the rise in the silver price of gold, have respectively reacted upon the prices of either as measured in agricultural produce, and it is with that factor alone that this present review is dealing.

## B. METEOROLOGY.

In tropical and sub-tropical tracts such as are comprised in India, where the population is mainly dependent on periodic rainfall for its resources, it is superfluous to dwell upon the great importance of the scientific collation of all the leading meteorological phenomena that are recorded throughout the length and breadth of the country. Observations of the simpler features included under this head, such as rainfall, barometric pressure and temperature, had been recorded for several years before the Government of India placed the subject in the hands of specialists for uniform treatment on the most approved lines. In 1875, the Meteorological Reporter made a tour of inspection of the 84 principal stations of observation, with the exception of those on the west coast, with a view of placing them on a basis which would allow of the fullest inter-comparison of the information hitherto independently recorded at each. The different instruments used and methods of observation adopted, together with the uneven distribution territorially of the stations, had hitherto rendered it impossible to make use of the registers in dealing with the meteorology of the country as a whole. The Government of India, accordingly, placed the whole system under the direction

direction of a central department from the year above mentioned, and after the instruments in use had been duly harmonized or new ones supplied, as the case might require, the number of registering stations was gradually increased, and the daily weather reports sent by them promptly tabulated for immediate use in the local centres and in the head establishment of the reporter. The work of the department was not, however, confined to observations taken on land, and a valuable series of registers taken by captains of vessels in the Bay of Bengal, the Persian Gulf and Arabian Sea, was obtained from time to time, to serve as the basis of investigation as to the origin and development of the violent local storms, cyclones, and hurricanes that prevail round the coast of India. The efforts of the meteorological authorities were much encouraged by the emphatic testimony to the past and future value of the results of the system then in its infancy borne by the Famine Commission of 1880. The operations were extended to a system of storm-warning by telegraphic report in 1879, which was afterwards considerably developed along both east and west coasts, and, in other directions, special observations were obtained as to the possible connection between the snowfall on the Himalaya and its sister ranges to the north and west, and in view of the sudden floods that occur in some of the large rivers debouching into the Gulf of Cambay, the plan was set on foot of telegraphing to all towns on their banks news of any abnormally heavy fall of rain in their tracts of origin. Charts have also been prepared of the monthly observations of marine meteorological phenomena in the Bay of Bengal, such as the distribution of barometric pressure, the prevalent winds and marine currents. The occupation of Upper Burma afforded an opportunity of ascertaining the predominant meteorologic features of a tract previously unknown, and three observatories, on the same system and with the same scope as those of the larger provincial stations, were established almost immediately after the annexation. In 1887 some changes in the working of the Department were made by the Reporter, based on the past few years' experience of what observation taken at the different grades of registering offices could, and what could not, be considered trustworthy. Thus the observation of radiation, both solar and terrestrial, was restricted to a few selected stations. The hour of transmission of the daily weather report was made earlier, in order to allow of the general results being published at Simla, Calcutta, and Bombay before noon; the adoption was pressed of still greater uniformity in the matter of rainfall record, a question of obviously vital importance to the higher work of the computing officers, and which the inspecting tours of the Reporter had found to be too often neglected, or left in incompetant or irresponsible hands. The elaborate scrutiny of the records of previous years had shown that much of the information regarding rainfall was such that no use could be made of it. For instance, in the Central Provinces a very important point has been left undecided on that ground, namely, the connection between the extension of forests and the fall of rain. The stations of observation were accordingly reclassified into three groups, according to the scope of their record. They range from the continuous and automatic operations of Calcutta, Lahore, Allahabad, Simla, Madras, and Bombay, to the simple observations telegraphed at 8 o'clock every day to the three central offices. A local system of storm signalling was established in Bombay, the working of which, it is stated, has been much appreciated by the shipping and other commercial classes of the west coast. Since 1889, too, the publications of the Department have increased, both in scope and number, and every year sees some additions to the stations from which information is collected. In 1891–92 there were 165 of these in working order, and since then several more have been added. The reduction and discussion of the past year's observations, terrestrial and marine, have been materially aided under the present centralised system, and receive adequate attention, not only from the specialists attached to the Department itself, but from experts in Europe and North America, to whom, under an arrangement approved by the Government of India, copies of the daily weather report, with its accompanying charts, are regularly forwarded. The interest and value of such information consists in a great degree in the fact that, for the first time, trustworthy and extensive data are thus made available for a large and varied tract, tropical in its general characteristics, and affected by a semi-annual system of periodic rainy seasons. The special publications of the officers of the Meteorological Department, irrespective of the ordinary and

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periodical reports prepared by them, have also been found of value in other parts of the world than that for the benefit of which they were primarily intended. It is true that in the present conditions under which the operations are conducted, the work of forecasting, especially as regards the character of the respective rainy seasons as a whole, is more restricted than it is found to be in some other centres of observation, but, on the other hand, it must be borne in mind that systematic control over a great number of stations has only been exercised for the last 17 years, a very short period in the meteorological history of a country, and that even in this brief space of time all that has been done in connection with what we may call the acute stages of meteorological phenomena, such as storms and cyclones, has borne fruit of the most substantial and satisfactory description.

The Financial and Revenue Accounts of the Government of India show that the annual cost of the meteorological operations has been comparatively small. The charges for the last eight years are given in the marginal statement. The headquarters of the Department are at Simla, where, also, delicate actinometric observations are conducted under the immediate control of the Reporter. The two chief local centres are Calcutta and Bombay. In the last named, and in Madras, there are astronomical observatories under Mr. C. Chambers, F.R.S., and Mr. C. Michie-Smith, F.R.A.S. and F.R.S. (Edin.), respectively. The Madras institution, under the late late Mr. Pogson, has been distinguished for the discovery of sundry minor planets between the orbits of Mars and Jupiter, with other astronomical data. It also gives uniform time to the greater part of India for railway and other purposes, and its longitude, determined by the latest observations to be 80°. 14′, 50·03″ E. of Greenwich, is the fixed point of departure of the great Trigonometrical Survey of India, to be mentioned in a later chapter. The specialty of the sister observatory is terrestial magnetism, for the registration of which continuous automatic machinery is kept at work. This institution also, as is befitting for that of an important shipping centre, devotes considerable attention to astronomical observations for the purpose of time-keeping, to the signalling of time in connection with navigation, and to the custody and regulation of chronometers for the Government of India, the Admiralty, and for private shipowners.

| | Rx. |
|---|---|
| 1881–82 - | 14,874 |
| 1882–83 - | 18,688 |
| 1883–84 - | 21,250 |
| 1887–88 - | 24,387 |
| 1888–89 - | 24,860 |
| 1889–90 - | 26,127 |
| 1890–91 - | 26,002 |
| 1891–92 - | 27,199 |

In the year 1891–92, to take a sample of the working of this valuable department, there were four first class, 64 second, and 97 third class observatories. Of the four new stations opened during the year, two, one at Bijipur, and one at Tinnevelly, were established for the special object of obtaining meteorological information regarding tracts liable to occasional local drought, not sufficiently represented by the stations already in work. Two others, in the Nilgiri and Palnai hills respectively, were specially destined for astronomical observations. That is, to ascertain whether the atmospheric conditions were sufficiently superior to those at Madras to justify the establishment of the observatory at one of them. Their object was obtained after a year's experience, and, though not within the exact scope of this review, it may be mentioned that the Palnai results surpassed those of the Nilgiris. Operations were extended also to the Nikobars, and those at Zanzibar were resumed; whilst others were begun in Kashmer. In the State of Haidrabad, too, seven observatories were got into working order during the year, and five more in Upper Burma were at work in 1892–93. In matters of detail, too, some improvements were made. Rain-gauges were supplied to many stations which had formerly received only those of obsolete pattern, and the periodical inspection of these instruments was made more systematic and generally efficient. Steps were taken to extend the observations, which are likely to be useful at a future date in appraising the influence of forests on rainfall. The department has repeatedly recorded its appreciation of the valuable services rendered by the telegraph officials, several of whom, at important storm-warning stations, are in charge of the meteorological observations. The extension of the telegraph system, in fact, has alone rendered the current record of observations possible. It was mentioned in the preceding part of this review that the Meteorological Department is one of those placed under the Revenue and Agricultural branch of the Secretariat of the Government of India. It has been specially fortunate, it may be added, in having been directed

directed since its establishment by two experts, such as Messrs. Blanford and Eliot, whose reputation is by no means confined to India, or even to the old world.

It is not the place to enter into any description of the peculiar features of Indian meteorology which render the co-ordination of the data from every part of the country a matter of administrative necessity. Mention has been made above of the results in special instances, such as the cyclonic disturbances on both coasts, but hitherto the information accumulated is not enough to serve as the foundation of what is, perhaps, one of the main practical objects of the observations, namely, the forecast of the character of the periodic rains, especially those from the south-west. The estimates now published are becoming annually more valuable in this respect, but the question is not one of projection over the succeeding four-and-twenty hours, a period which suffices for the conditions of the western hemisphere, but of giving warning at a sufficient interval beforehand to allow of preparations being made by the State in all the various directions in which attention is required in case of a wide spread or even an intense local failure of crops. The science of meteorology thus enters very practically into the administration of a famine, a duty which may be now said to have passed in India beyond the empirical stage, chiefly owing to the steps taken with regard to it, as mentioned in the preceding section of this chapter, during the last ten or twelve years.*

* The relation between the density of population and the amount of rainfall and between the range of temperature and the house accommodation, is dealt with at pages 28 and 55 respectively of the Census Report for 1891.

## CHAPTER XIII.

## FORESTS.

FORESTS.

AMONGST the natural resources of India, next in importance to the produce of the field, comes, at all events in the present day, that of the wood. Outside the limits of the western desert there are few tracts in the country in which vegetation of more or less value cannot be got to flourish in profusion; and, as has been shown in the last chapter, the field that here lies open to Forestry is by no means confined to the mere commercial exploitation of the timber growth, but is inextricably connected, except in a few favoured localities, with the agricultural welfare of the great masses of the people. Setting on one side the tracts in which special classes of valuable timber are found, the whole country may be said to be, potentially, a vast expanse of jungle, either of scrub at the worst, or of the small timber to the use of which the native architects have in the course of ages adapted their ideal. The abandonment of cultivation for a few years in any part of the plains or table-lands is enough to prove this. Cultivation has been, in fact, carved out of the jungle, and in the old leases granted to colonists in many, if not most, provinces, whether by the British authorities or their predecessors, one of the main conditions imposed, or, practically, the essential part of the agreement, was that the grantee should "clear the jungle," and settle cultivators on the space thus rendered available. In the process of time the scrub or other growth was cleared to such purpose that the supply of fuel was too often exhausted and the village left almost entirely dependent on the cow-dung cakes, dried in the sun, which ought to be bestowed on the land in a more efficient form than that of ashes. The subsidiary question as to the effect of the denudation on the rainfall is one that may be considered still open, so far as the plains are concerned, since the results of the re-afforestation that has been taken in hand of late years are not yet sufficiently manifest to allow of a conclusion on the subject; but, as regards the beneficial action of a fair growth of vegetation over the gathering-ground of the streams and rivers that take their rise in the lower ranges and uplands, there can be no doubt. Where such a growth is already in existence or can be established, the water received in the course of the sudden and violent storms characteristic of the Indian rainy season is retained in the soil, instead of running off at once in destructive floods and freshets. The supply is thus of longer duration, and the spring level in all the country below is gradually raised.

Conservancy.

Systematic conservancy of forest growth is of comparatively recent introduction into India, and it has, accordingly, a very great amount of lee-way to make up before it can overtake and outstrip the centuries of maltreatment to which what should be the natural forest areas of the country have been subjected at the hands of both intelligent agriculturalists and improvident wild tribes, each hacking and hewing at will for their respective purposes. Even in the present day we find the latter class dependent upon a system of tillage which no forest can suffer and live unharmed. A patch of jungle is cleared, and the timber and brush left to dry where it fell. Fire is then called into play, and the ashes of the dead wood, worked by hand into the virgin soil, help in producing a prolific crop of some small grain or other, on which the family that cleared the patch subsists for the year. In the more advanced tribes, a second year's crop is got off the same patch, but, as a rule, the family moves on to fresh woods,

woods, and leaves the abandoned clearing to the recuperative forces of nature. In 10 years or so, the new growth is sufficient to invite a second destruction. In the plains, again, in addition to the growing scarcity of firewood, the question of grazing is gaining prominence. Every village contains a considerably larger number of cattle than it can maintain in a thoroughly efficient state, and many of the animals, therefore, are driven to the village common, to pick up their bare living on the scraps of grass that are to be found there. In some tracts, of course, there is still abundance of waste land of this quality, whilst in others nearly every rood has been brought under the plough, and the cattle actually required for that operation and for the milk supply of the farmers, are selected from the ruck and kept on a higher standard of diet. Everywhere the superfluous and the weaklings, if there be no market in the neighbourhood, are turned out to die what is there considered to be a natural death, or at least one that involves in the Brahmanic system no religious or moral reprobation. The exports of hides, amounting in value to Rx. 48½ millions in the last 10 years, tell of one side of this question, whilst the agricultural statistics, incomplete as they are admitted to be at present, tell of the steady increase in the herds from which these *exuviæ* are collected by the village menials. The provision of adequate grazing, therefore, for these necessary adjuncts of Indian rural life, come practically within the province of forest conservancy, and the waste land available for the purpose has to be administered on a system that will ensure a sufficient supply of grass of the best quality the land is capable of producing. FORESTS.

There remains the question of timber, of which India possesses a large and valuable variety. It is not the place to enter into a description of the distribution of this State property, beyond the mere mention of the chief items of the long list to be found in the Forest Manuals and other professional and commercial works. The first place is held by the teak, which is found at its best in Burma, especially in the Upper Division, and on the south-west coast, in Kanara and Malabar. It is also the most prevalent and valuable product of the forests at the foot of the Ghats in Bombay, and along the Satpura and Vindhya ranges, as far as the middle of the Central Provinces, Here it meets the Sal, which, however, is more specially found in the sub-Himalayan tracts of the North-West Provinces. Oudh, Bengal, and Assam. In the Himalayas themselves the cedars and other conifers form the bulk of the timber, and in the lower ranges, again, such as the Khasi in Assam, and those of Burma, various pines are prominent. In the north-east of Assam and in the north of Upper Burma the *Ficus elastica*, or india-rubber tree, prevails. The sandal wood flourishes all along the southern portion of the Ghats, especially about Mysore and Coorg, where, too, as well as in Upper India, the blackwood is found. A valuable tree, known as the Padauk, is at present restricted almost entirely to the Andaman Islands, with a scattering in Lower Burma. There are many other timber trees that are in general demand in different parts of India, but the above are the best known outside that country. There is also the universally-found bamboo, and in the north-western tracts the equally useful rattan. Timber.

Before entering upon the subject of the area under forest it is as well to dwell briefly upon the system of administering the lands thus classed. This is regulated, in the main, by the provisions of an Act of the Governor General's Council, passed in 1878. The land that is dealt with as forest is thereby classed as reserved or protected, and, in some parts of the country, also as village forest. Where the land is not already treated as forest under former arrangements, it is notified as having been selected for the purpose, and an inquiry is thereupon made into all rights and privileges exercised or claimed over it by villagers, as a body, or by private individuals. When these have been disposed of, the land is demarcated and boundary marks are set up. In the case of reserved areas, as the name implies, the control of the State authorities it more complete than in the case of protected or other classes of land assigned to forest, and it is in such areas alone that systematic conservancy can take full effect. In consideration of this, the local Acts dealing with the forest land in Madras and Burma recognise but one class of forest, that in which the reservation is complete. The provisions of all the Acts relating to forests provide for the Administration.

Forests.

preservation and management of such lands, the control of forest produce as therein defined, when in transit, and the levy of duties thereon. For each forest a working plan, in more or less detail, is prepared by the trained agency of the department, and by this the treatment of the produce is regulated. In regard to the rights of the surrounding population, above mentioned, due regard is paid to the economic requirements, the customary privileges, and the class prejudices of certain communities, so far as these are not incompatible with efficient conservancy. In order to provide for the recognition of such difficulties, and to establish, as is often not an easy task, a *modus vivendi* between the two interests, the investigation is usually entrusted to one of the Revenue staff of the tract in question, who is in a position to hold the balance true. Once the tract is made over to the Forest Department, the scientific and technical administration passes to the trained officer in charge of the circle; but in all questions of general administration, in which the reasonable interests of the local public are concerned, the two departments have to work in consultation with each other, particularly where the forest land is mainly reserved with a view to the satisfaction of the every-day wants of the rural population, such as in the case of firewood and grazing tracts, in regard to which the Government of India has issued special instructions.

Training of the Forest Staff.

The administration of the forests of India is conducted, as just mentioned, through a staff partly consisting of trained officers recruited in England, partly through an executive establishment provided locally. The arrangements in Madras and Bombay are to some extent detached from those immediately under the Government of India, but the general working throughout the country is supervised by an Inspector General attached to that Government. The superior staff consists of officers in charge of circles, known as Conservators, with their deputies and assistants. Most of these are now trained in forestry in Europe. Until 1885 it was the custom to send the candidates selected by competition to undergo a course of forest instruction in Germany, or at Nancy, in France. In that year, however, a special branch of forestry was instituted at the Indian Engineering College, at Cooper's Hill, to which all selected candidates are attached, and make excursions at different times to inspect the practical working of what they have been learning, either in the United Kingdom or on the continent. On passing out of this course, the officer is attached to some forest head-quarters in India, until he has acquired a competent acquaintance with the vernacular language of the people with whom he has to deal in the course of his active duties. He is tested, also, in his knowledge of the revenue and forest law of the province, and is thus started fully equipped for work under a Conservator. In addition to the superior staff, thus constituted, there is a large executive body consisting, necessarily, of natives of India. Some of these are trained for the higher and more responsible duties at the Forest School, an institution established in 1878, at Dehra Dun, in the North-West Provinces, on the suggestion of Sir D. Brandis, a late Inspector General, and the founder of much, if not most, of the present system of forest administration in India. This institution opened with a course of practical training, but in 1881 theoretic courses were added, and in 1884, the whole passed under the control of the Inspector General, as an Imperial undertaking. Instruction is devoted chiefly to the class who are ultimately to be employed as rangers, but the curriculum has been expanded, so that members of the controlling staff appointed in India, on the one side, and the protective, or forester grade, on the other, can both derive advantage from it. The course includes, not only forestry, in its more extended signification, but forest law, elementary botany, mineralogy, surveying, physics, and mathematics. The subordinate agency differs, necessarily, in both number and duties according to the nature of the forest tract. Where, as in the Bombay Presidency, the forests are to a large extent patches in the midst of cultivation, a numerous establishment has to be employed. Where, on the other hand, the forest consists of large and continuous stretches of uninhabited jungle, protection is a task of comparative ease. It is obvious, therefore, that in the former the class of men required is more difficult to obtain and to supervise than in the latter, where the friction with the outside public is reduced to a minimum.

Area under Forest.

The next point is the area under forest. This, as previously explained consists

consists practically of two classes of forest, the reserved and others. The following table gives the former during the last decade in square miles :— FORESTS.

| PROVINCE. | 1881–82. | 1883–84. | 1885–86. | 1887–88. | 1889–90. | 1891–92. |
|---|---|---|---|---|---|---|
| Madras | 1,182 | 2,870 | 2,737 | 4,239 | 4,081 | 7,175 |
| Bombay | 9,789 | 9,398 | 9,505 | 9,803 | 10,339 | 10,318 |
| Bengal | 4,236 | 4,635 | 4,972 | 4,987 | 5,195 | 5,211 |
| North-West Provinces | 3,326 | 3,331 | 3,390 | 3,608 | 3,591 | 3,768 |
| Panjab | 1,160 | 1,022 | 1,068 | 1,535 | 1,694 | 1,715 |
| Central Province | 19,430 | 19,429 | 19,434 | 20,052 | 19,708 | 19,680 |
| Assam | 2,066 | 2,314 | 2,332 | 3,310 | 3,472 | 3,612 |
| Berar | 1,394 | 1,635 | 1,546 | 1,542 | 2,072 | 1,256 |
| Coorg | 234 | 233 | 239 | 241 | 241 | 113 |
| Ajmer | 122 | 139 | 144 | 139 | 139 | 139 |
| Burma, Upper | — | — | — | — | — | 1,059 |
| „ Lower | 3,274 | 3,759 | 4,471 | 5,091 | 5,574 | 5,615 |
| TOTAL | 46,213 | 48,765 | 49,838 | 54,547 | 56,106 | 59,743* |

* Including 82 square miles in British Baluchistan.

Though the areas in the various provinces have not uniformly increased, the general result has been the expansion of the forest area by 29 per cent. in the period in question. The comparison cannot accurately be carried into the total area controlled by the Forest Department, because the protected and unclassed land fluctuated to a considerable extent on the record, without, possibly, any material change in the actual administration. In Madras, for example, over 2,000 miles were transferred in the last year quoted from one category to the other. In the Central Provinces, again, where the division is into those which are put permanently under forest and those which can be, in part, given out for cultivation when necessary, it has been found that a good deal of the latter is likely to be required within a short period, in consequence of the expansion of the population. In Upper Burma the process of reservation is going on as rapidly as possible, and no less than 1,024 miles were notified last year. If the whole of the controlled land be taken into consideration, the area, which was 71,972 in 1881–82, was 114,966 miles in 1891–92. Concurrently with the reservation, or as far as possible, at the same rate, the settlement is carried on, and demarcation follows settlement. Between two and three thousand square miles, too, are surveyed on large scales every year by the Survey of India, and the results are of the greatest service in making out the working plans mentioned above. As to these plans, the general system is to expedite, as far as possible, a uniform method of improving large tracts, and locating fellings therein, without waiting for the scientific detail that will be put in force when the whole tract has been brought into line, in respect to exploitation. Where the produce is of especial value, or where the problems to be solved are peculiarly intricate, from an arboricultural standpoint, the more elaborate course is, necessarily, advisable from the beginning of operations, but it is not so in the case of ordinary forest tracts, where the produce is not in urgent or pressing demand.

The provision of grazing area in 1891–92 seems to have been liberal enough in most provinces. In Bengal, for instance, where 769 square miles out of 5,211 were open, the average incidence was one animal to 600 acres. In the North-West Provinces, the percentage open varied from 70 in the northern circle Grazing.

FORESTS.

circle to 48 in the central. In the Panjab, 72 per cent. of the total controlled area was open, not only to cattle, but to the class departmentally stigmatised as "the browsers," namely, camels, goats, and sheep, the chief enemies of good conservancy. In Ajmer, as in the previous year, nearly the whole area was thrown open, in consequence of the drought in this province and Rajputana. In Madras the system of placing village waste assigned for forest under partial conservancy was abandoned in favour of reservation, certain portions being opened in rotation, primarily for the benefit of the agricultural cattle of the villages immediately adjacent, and, then, if there be room, for outsiders. The Local Government also issued instructions that where the area already placed under forest control might turn out insufficient to provide for the legitimate needs of the cultivating population in this respect, additions were to be made to the reserves. In the Central Provinces, as in the Panjab, about 70 per cent. of the gross area was open to grazing of all kinds, but, as compared with previous years, browsers were excluded from a considerably larger proportion. The Bombay forests, with the exception of the Ghat tracts and the Satpura range, consist very largely of land more adapted for grass and brushwood than for timber, and as the reserves are often scattered widely over cultivated plains, the arrangements that have to be made for the grazing needs of the public are peculiarly hard to devise and then to supervise. Some modification of the current rules were made during the preceding year, and brought into effect in 1891–92, but as a large area was thrown open to free grazing, in consequence of the prevailing drought, the working, wherever it could be tested, was reported to be satisfactory. In connection with the question of grazing lands is that of protection against trespass and pilfering of forest produce. The former is prevalent in the plains, and the latter, as may be supposed, amongst the tribes who have hitherto been allowed the free range of the forest for any purpose that suggests itself to them. In considering the following table, accordingly, due weight must be attached to the fact that until within the last fifteen years or so, trespass and the destruction of young growth, quite apart from taking dry wood, nuts, honey, or other produce of the forest, were not treated as offences at all throughout the greater part of the area which now furnishes the bulk of the calendar.

TOTAL Number of Forest Offences Returned.

| Province. | 1883–84. | 1885–86. | 1887–88. | 1889–90. | 1890–91. | 1891–92. |
|---|---|---|---|---|---|---|
| Madras | 1,136 | 2,414 | 3,099 | 4,031 | 7,087 | 11,636 |
| Bombay | 2,898 | 6,297 | 8,217 | 10,140 | 12,589 | 17,787 |
| Bengal | 2,229 | 1,363 | 2,383 | 2,644 | 2,162 | 1,944 |
| North-West Provinces | 714 | 363 | 873 | 806 | 928 | 869 |
| Panjab | 1,266 | 2,184 | 1,822 | 1,986 | 2,120 | 1,963 |
| Central Provinces | 10,191 | 8,841 | 7,081 | 8,554 | 8,080 | 8,047 |
| Berar | 381 | 422 | 387 | 381 | 416 | 373 |
| Assam | 131 | 130 | 333 | 448 | 334 | 431 |
| Coorg | 8 | 22 | 8 | 12 | 13 | 30 |
| Ajmer | 67 | 123 | 238 | 236 | 239 | 139 |
| British Balochistan | 22 | 60 | 49 | 8 | 84 | 160 |
| Lower Burma | 250 | 316 | 403 | 1,240 | 950 | 1,320 |
| Upper „ | — | — | 21 | 146 | 198 | 362 |
| TOTAL | 19,293 | 22,535 | 24,914 | 30,632 | 35,200 | 45,061 |

A few lines of comment may be given to this table. Every year, it will be noticed, added to the tale of offences, either prosecuted or compounded. In the first year the Central Provinces contributed half the total. Next year, a third only, and Bombay above a quarter. The latter Presidency then took the place of the former, and kept at a third and over till the last year dealt with. The greatest gap is between 1890–91 and the following year, so it is worth while to take the return by provinces. In Madras, not only was the number of cases of trespass swollen by the bad season, which had left little forage outside the reserved area, but the local authorities expressed an opinion that the operation

operation of the law had been very insufficiently supervised by the forest officers in some districts, so that a good many prosecutions were initiated by their subordinates on inadequate grounds, or even on no grounds at all. In Bengal, the large number of cases compounded were from the Sundarban tract, where this method of checking offences has been found more suitable than prosecution. In the North-West Provinces, the main point noticed locally was the decrease in the proportion of convictions. There were two districts only in the Central Provinces in which the Chief Commissioner considered that attention was required, especially as to preventing abuse in the matter of compounding, a power that may easily become the means of oppression if not carefully watched In Lower Burma, the feature of most importance, apart from the spread of the habit of compounding, was the light fines occasionally inflicted for setting fire to parts of the forest, accidentally, through negligence, or otherwise. In Assam, this offence appears to have been thought a subject for compounding, a view which is anything but in accordance with the general rule. The other provinces present no special feature of interest in the return, except Bombay, which has the remarkable characteristic of compounding a greater number of cases than are dealt with by either method in the whole of the tract under the Government of India. The Inspector General attributes this result, partly to the greater efficiency of the local subordinate establishments, and partly to the character of the forest areas in the Western Presidency, which has been mentioned above. The reserved areas are, to a great extent, surrounded by a populous and purely agricultural country, so that cattle are constantly on the move in and out, especially as the greater part of the reserves are not fenced, at least in the northern division which furnishes the bulk of the cases. The attention of the Local Government, however, was attracted to this point in connection with the return for 1890–91, and measures were in progress at the end of the period under review to prevent abuses arising out of injudicious and over-zealous application of the provisions of the law regarding the compounding of forest offences.

Forests

The valuable work being done every year in the way of repairing the damage resulting from previous generations of misuse, forms an interesting portion of the annual reviews, but want of space prevents its adequate treatment here. The existing growth is too often far below the capacities of the soil and climate simply owing to the reckless use made of the forest in former years. A good deal is done in the way of thinning and eradicating the creepers and undergrowth that prevent the choicer specimens of timber from doing their best, whilst planting and selection are carried on at other parts of the forest. The protection of the forest against fire, the danger from which is always imminent in the dry season, is another duty which occupies a good deal of the energy and time of the department, with results that appear to be, on the whole, successful.

Plantation and Thinning.

In respect to the demand for forest produce, we may indent on the trade returns for the following table of the exports of a few of the chief articles of commerce that come into the above category :—

Trade in Forest Produce.

| ARTICLE. | VALUE EXPORTED. | | | | | |
|---|---|---|---|---|---|---|
| | 1881-82. | 1883-84. | 1885-86. | 1887-88. | 1889-90. | 1891-92. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Caoutchouc | 108,843 | 113,359 | 65,620 | 115,433 | 113,750 | 117,237 |
| Shell Lac | 555,241 | 481,697 | 439,642 | 420,327 | 373,086 | 606,792 |
| Lac Dye | 9,196 | 1,408 | 3,163 | 620 | 868 | 250 |
| Cutch and Gambier | 253,084 | 353,200 | 252,839 | 433,847 | 333,400 | 317,299 |
| Cardamoms | 63,631 | 56,833 | 56,001 | 20,486 | 18,385 | 31,896 |
| Myrabolams | 144,492 | 184,106 | 299,365 | 250,618 | 317,533 | 393,690 |
| Sandal, ebony, &c. | 46,979 | 26,921 | 44,726 | 65,232 | 64,195 | 94,194 |
| Teak | 506,792 | 525,448 | 550,515 | 367,274 | 762,998 | 474,852 |
| TOTAL VALUE | 1,688,258 | 1,742,972 | 1,711,871 | 1,673,837 | 1,984,215 | 2,026,210 |

FORESTS.

The market varies, it appears, very considerably from year to year for several of the products quoted, but, on the whole, the last few years have been decidedly above their predecessors. The most important items in the list are teak, cutch, shel-lac, and, especially of late, myrabolams. These last go chiefly from Bombay to the United Kingdom, Austria and Germany. The cutch is shipped from Burma and Bengal, and the United States took in 1891-92 to the value of about Rx. 93,300, whilst the United Kingdom's share was Rx. 14,400. Caoutchouc shows the same features as cutch in both port of shipment and destination. Bombay and Madras share the greater part of the sandal wood trade, which is conducted principally with China and France. Teak finds its way from Burma and Bengal to the United Kingdom, the Cape and Gibraltar. Bengal has practically the monopoly of shel-lac, and sends it mainly to the United Kingdom and the United States. Amongst the products the export of which show a falling tendency, cardamoms go chiefly from Bombay. About a third passes to the United Kingdom and Germany, whilst the rest is taken by Asiatic countries, such as Persia, Arabia, Baghdad, and Aden.

Finance.

In conclusion, the financial position of the forest operations requires a few lines of comment. In the chapter on finance in general it was stated that the net revenue from this source was growing annually into importance, and the following table, which gives the net figures from the departmental, not the general, returns indicate the share taken by each Province in the growth :—

NET FINANCIAL RESULTS, BY PROVINCES.

| YEAR. | TOTAL. | Madras. | Bombay. | Bengal. | North-West Provinces and Oudh. | Panjab. | Central Provinces. | Assam. | Berar. | Burma. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Lower. | Upper. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1871-72 | 156,959 | 18,434 | 55,238 | 3,373 | 6,083 | 260 | 32,549 | * | 5,471 | 39,318 | — |
| 1873-74 | 247,418 | 13,873 | 46,649 | 4,009 | 74,188 | 12,098 | 28,243 | * | 17,691 | 59,332 | — |
| 1875-76 | 287,226 | 8,583 | 45,453 | 5,560 | 52,738 | 35,292 | 35,285 | *— 153* | 14,128 | 96,336 | — |
| 1877-78 | 250,978 | *— 1,531* | 38,381 | 16,331 | 47,418 | 16,308 | 36,188 | 3,317 | 16,928 | 74,485 | — |
| 1879-80 | 225,656 | 7,664 | 44,772 | 17,378 | 32,337 | 16,914 | 48,415 | 3,151 | 19,699 | 42,670 | — |
| 1881-82 | 324,713 | 20,349 | 65,894 | 23,912 | 14,988 | 17,204 | 67,587 | 69 | 8,053 | 108,158 | — |
| 1883-84 | 414,799 | 16,697 | 93,893 | 30,652 | 56,950 | 25,703 | 55,871 | 1,188 | 15,144 | 129,145 | — |
| 1885-86 | 413,079 | 26,068 | 152,682 | 22,703 | 48,698 | 17,494 | 59,146 | *— 1,484* | 16,061 | 87,291 | — |
| 1887-88 | 419,992 | 24,571 | 108,857 | 26,743 | 41,671 | 10,902 | 54,043 | 4,042 | 22,268 | 118,620 | 17,572 |
| 1889-90 | 729,105 | 39,639 | 136,709 | 37,057 | 75,101 | 27,586 | 45,974 | 12,237 | 26,399 | 180,187 | 153,227 |
| 1891-92 | 672,283 | 36,996 | 135,319 | 36,623 | 77,330 | 37,980 | 55,598 | 6,860 | 31,282 | 153,299 | 95,344 |

* Assam was separated from Bengal in 1874 only.

Burma and Bombay, it appears, now account for Rx. 383,900 of the total of Rx. 672,200, or 57 per cent. The latter and several other Provinces show over double the revenue of 10 years ago, and in nearly all the increase has been large. Improvement in management accounts for much of this result, and a good deal of the rest is attributable to the extension of the grazing operations of the Department, with the demand for sleepers that accompanied the activity in railway construction that has characterised the decade.

The details given in the general accounts of the Government of India show the nature of the receipts and the proportion borne in the total by each of the items in the different Provinces. The following table accordingly summarises these results.

## ABSTRACT of FOREST REVENUE and EXPENDITURE in 1891–92.

| HEAD. | TOTAL.* | Madras. | Bombay. | Bengal. | North-West Provinces and Oudh. | Panjab. | Central Provinces. | Assam. | Burma. | | India, General. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Upper. | Lower. | |
| A.—REVENUE: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1. From timber, &c. | 776,238 | 41,495 | 123,892 | 38,520 | 111,052 | 44,512 | 20,262 | 20,611 | 98,806 | 242,326 | 34,762 |
| 2. Firewood and charcoal | 214,907 | 38,705 | 97,251 | 20,618 | 15,806 | 28,025 | 9,988 | 322 | 1,121 | 2,247 | 824 |
| 3. Bamboos | 60,056 | 14,650 | 9,820 | 4,237 | 11,458 | 1,394 | 13,191 | 602 | 2,788 | 1,522 | 394 |
| 4. Grass, fodder, &c. | 190,971 | 23,033 | 75,326 | 991 | 15,389 | 22,000 | 51,797 | 615 | - - - | 41 | 1,779 |
| 5. Miscellaneous produce† | 158,665 | 45,214 | 9,509 | 9,290 | 12,863 | 911 | 35,981 | 5,424 | 23,728 | 5,122 | 10,623 |
| 6. Confiscated drift and waste | 21,914 | 1,375 | 1,204 | 821 | 2,249 | 2,013 | 425 | 354 | 4,541 | 8,932 | — |
| 7. Duty on foreign timber | 25,350 | - - - | 2,360 | - - | 818 | - - - | - - - | 673 | - - - | 21,499 | — |
| 8. Revenue from shared or leased forests | 3,089 | 3 | 347 | - - | - - - | 322 | 69 | 714 | - - - | - - - | 1,634 |
| 9. Fines and forfeiture | 3,568 | 155 | 1,655 | 118 | 118 | 86 | 101 | 189 | 109 | 954 | 83 |
| 10. Refunds | 1,118 | - - - | 151 | 255 | 115 | 218 | 104 | 42 | 15 | 198 | 20 |
| 11. Miscellaneous | 34,706 | 4,792 | 6,950 | 4,105 | 3,283 | 2,526 | 4,072 | 4,067 | 1,622 | 2,971 | 318 |
| A.—TOTAL REVENUE | 1,490,582 | 169,422 | 328,465 | 78,955 | 173,151 | 102,007 | 135,990 | 33,613 | 132,730 | 285,812 | 50,437 |
| B.—EXPENDITURE: | | | | | | | | | | | |
| 1. General direction | 5,367 | - - - | - - - | - - | - - - | - - - | - - - | - - | - - - | - - - | 5,367 |
| 2. Conservancy and works‡ | 480,036 | 71,994 | 108,271 | 18,115 | 62,832 | 36,042 | 37,690 | 13,130 | 8,463 | 99,072 | 24,427 |
| 3. Establishments | 357,459 | 59,338 | 84,443 | 23,932 | 32,392 | 27,894 | 42,623 | 13,583 | 25,863 | 33,424 | 13,967 |
| 4. Charges in England, including exchange thereon | 1,064 | - - - | - - - | - - | - - - | - - - | - - - | - - | - - - | - - - | 1,064 |
| B.—TOTAL EXPENDITURE | 843,926 | 131,332 | 192,714 | 42,047 | 95,224 | 63,936 | 80,313 | 26,713 | 34,326 | 132,496 | 44,825 |

* Berar revenue is not included here, though it is given in the departmental returns.

† Including sandalwood, Rx. 12,222, and commutation fees, Rx. 11,113.

‡ Including Rx. 22,287 on account of forest surveys.

FORESTS

It will be observed that the proportion borne by the revenue from timber varies from 15 per cent. in the Central Provinces to 84 per cent. in Lower Burma. In the Upper Division of the latter Province the proportion is 74, and it exceeds 60 per cent. in both Assam and the North-West Provinces. In Bengal and the Panjab it falls to between 40 and 50 per cent. Bombay shows 37 per cent. from this source, and Madras just below the quarter. The average for the whole of the returning Provinces is 52 per cent. Firewood and charcoal yields 14½ per cent., and grass, &c., 13 per cent., with 15 per cent. from bamboos, sandal-wood, and miscellaneous produce.

## CHAPTER XIV.

## MINES AND FACTORIES.

Mines and Factories.

In comparison with its vegetable resources, the mineral wealth of India stands by no means high in the present day. In one respect, however, they have reached an assured position in the industrial and commercial development of the country, and there are indications of still further advance, both in that and in other directions. The aid of the geological survey has been called in to investigate the possibilities of the various coal-bearing and metalliferous tracts from a practical point of view, in supplement of the scientific inquiries that fall within the sphere of their more strictly legitimate duties. The result has often been to encourage exploitation, on the one hand, whilst with equal frequency, perhaps, on the other, the observations of trained agency have sufficed to condemn prospects that to the uninitiated seemed full of hope. From an economical point of view, again, it is in every way desirable that some means should be found of diverting a portion of the masses of labour available in India from the land, to which their attention is now almost entirely devoted to other means of livelihood, and one of the less difficult modes of approaching this most difficult problem is by the opening out of large industries of a character not too far removed from that of the traditional occupation of the people. In order to establish such undertakings on the scale that alone will be of any material benefit to the class in question, steam-power is necessary, so that the development of the coal-mining industry must go, as far as possible, hand in hand with that of the aggregation of labour in factories. It is as well, accordingly, to treat of the two classes of employment more or less in connection with each other, in a single chapter. The first subject, then, that will be here reviewed is that of the mineral resources of India.

### Mining, &c.

The chief mining interests in India at the present day are those in the coal deposits of the central and eastern parts of the country, in the gold-fields of the Mysore plateau, and, though to a minor extent, in the petroleum yield of certain widely-scattered strata in Baluchistan, the Panjab, Burma, and the extreme east of Assam. The investigations of the geological surveyors in Tenasserim in 1891 justify the expectation of a remunerative exploitation of tin in the Maliwun tract, if the enterprise be backed with enough capital to start work on the most efficient system. The same may be said with regard to the copper that is to be found in parts of Sikkim, which were also examined during that year. The Ruby Mines of Upper Burma were worked by the private company to whom the rights were leased a few years back, but not apparently with much success. The sum of Rx. 20,000 due to the State on account of the second instalment of the rent payable for the concession was not paid, but the local report states that the relations between the company and the native miners were cordial, without further comment. The iron industry is now conducted on a large scale at Barakar in Bengal only.

The Bengal Iron and Steel Company showed a return in 1891 of 4 per cent. on their capital, and in 1892 of 10 per cent. The working of last year showed a general improvement, and not only was much of the preceding year's stock of pig iron sold off, but the whole current output, except 2,672 tons, found a market. Castings also went off very well, and the economy in cost of production made the Company confident of being able to work up to their

MINES AND FACTORIES.

contract amount. Smelting on a small scale goes on in parts of the Central Provinces, the Ghat tracts of Bombay and in Salem and the surrounding districts in Madras, but the pursuit is languishing, owing to the cheapness and quality of the imported article.

The coal mining industry, on the other hand, is decidedly lively. The marginal table gives the imports of foreign coal, together with the output of that from Indian mines, during the decade and for alternate years of the 10 years preceding 1881–82. A comparison of the two shows how much more rapidly the native product is gaining ground than the foreign, and also, that the fluctuations in the latter are far more violent than those in the former. By far the greatest output is that of the Bengal mines, which yield about three-fourths of the whole. There were no less than 77 of these establishments at work in 1891–92, out of a total number of 87. The output was returned as 1,747,000 tons. In the Central Provinces there are two mining concerns, Warora and Mohpani, which yielded in the same year 141,736 tons. This is about the same output as is returned from the Singareni works in the Nizam's territory. The Umaria works, which have been open since 1884, and the Dandot mine in the Panjab, which in 1891-92 attained its fifth year, each produced between 60,000 and 70,000 tons. Some 10,000 tons came out of the Khost mine in Balochistan, and the Assam output, from Margherita, amounted to 154,000. As regards ownership and working, the two largest concerns in Bengal are in the hands of the East Indian Railway, that is, of the State, whilst the rest are worked by private agency or Companies. The Warora and Umaria works in the Central Provinces and Rewah respectively, are also State concerns, and Mohpani is worked by a Company. The Panjab and Balochistan mines are connected with the North-western line, also State property. The three Assam mines are all in the hands of a Company. The coal from these last is said to be the best for steam-vessels that has yet been put on the Indian market, and the quantity available has been rapidly increasing of late. As an outlet for the surplus labouring population now massed on the land, the present condition of the coal industry is insignificant, since only about 25,000 persons are returned as employed in Bengal, and about 10,000 in all the rest of India. The output of 1891-92, taken at the local average selling price, was estimated to be worth about 3·4 rupees per ton. The foreign coal imported in the same year bore a returned value of 16·97 rupees for the same quantity, or nearly five times the price. Obviously, therefore, the efficiency of the latter must be very much greater than that of the native product to bring the consumption up to one-third of the latter. But in the case of coal carried far inland the cost of transport must be compared as between the Bengal and the foreign coal. The former cannot compete, it appears, with foreign coal delivered by sea to Bombay and Sindh, but it has driven out a great proportion of the latter from not only Bengal but from Burma also. It is also making its way in Ceylon, Java and the Straits Settlements. It may be added, moreover, that the examination of the coal-bearing strata of India is not yet complete, and that there is a prospect, therefore, of fresh discoveries rich enough to repay the establishment of extensive works. The raw material is even now found in many parts besides those above mentioned, but not in sufficient quantities to attract capital. The researches into the mineral oil-bearing strata have not been as yet satisfactory in their result. In Khattan, near the Sibi-Harnai line, the borings made within the last eight or ten years yielded about 400,000 gallons, but showed signs of

| | Imports from Abroad, including Government Stores. | Output of Indian Collieries. |
|---|---|---|
| | Tons. | Tons. |
| 1871–72 | 374,167 | — |
| 1873–74 | 361,208 | — |
| 1875–76 | 404,060 | 1,015,210 |
| 1877–78 | 609,833 | 924,562 |
| 1879–80 | 608,760 | 1,019,793 |
| 1881–82 | 648,201 | 997,730 |
| 1882–83 | 652,347 | 1,130,242 |
| 1883–84 | 712,900 | 1,315,976 |
| 1884–85 | 757,673 | 1,397,818 |
| 1885–86 | 805,700 | 1,294,221 |
| 1886–87 | 781,959 | 1,388,487 |
| 1887–88 | 886,680 | 1,564,063 |
| 1888–89 | 877,843 | 1,708,903 |
| 1889–90 | 656,867 | 1,946,172 |
| 1890–91 | 817,004 | 2,168,521 |
| 1891–92 | 773,624 | 2,328,577 |

of exhaustion. Fresh borings were made higher up the line, but the yield has not hitherto been encouraging. In Makum, where the concession has been given to the Assam trading company, which also works the coal mines, borings were more successful as to quality, though the quantity is still too small to return a profit. The Burma wells continue, therefore, to be the most prolific. The best at present discovered are in the Magwe district, at a place which takes its name (Yenan-gyaung) from the oil found there. There are wells also on the opposite side of the Irawadi, higher up, in the Pakokku and Minbu districts. The conflicting claims of the Burma oil company, the Lepel-Griffin syndicate, and the local Burman workers, were settled in 1891-92; the area in question was demarcated and subdivided into blocks for working purposes, and the State wells made over on lease to the Burma Company. The opening for this popular illuminant can be appreciated from the figures given in the margin. The principal gold mines of India lie in the protected State of Mysore, so that they are excluded, strictly speaking, from a review that is concerned with British territory alone. The available statistics, however, are of sufficient interest to justify their quotation, so a short table containing them has been inserted in the margin. In 1890, a sudden wave of gold-mining fever reached Calcutta, and 46 companies were floated within a few months. Not a very large proportion of the nominal capital was ever paid up, and the return of gold amounted, in the aggregate, to about an ounce. The El Dorado in question was situated in the Chutia Nagpur and Eastern hills of the Central Provinces, where washing for gold in the mountain streams had been known to have been fitfully conducted for generations. It does not appear probable that the attempt to work the supply by means of speculation will be renewed at present. There is little else in regard to mining that need find place in this review. We may pass on, accordingly, to the second section of the chapter, namely, that relating to manufactures.

MINES AND FACTORIES.

| Year. | Mineral Oil Imported. | |
|---|---|---|
| | Quantity. | Value. |
| | Gals. | Rx. |
| 1875-76 | 623,864 | 44,937 |
| 1878-79 | 3,775,674 | 271,711 |
| 1881-82 | 9,883,049 | 504,033 |
| 1883-84 | 13,883,838 | 561,716 |
| 1885-86 | 21,311,942 | 851,828 |
| 1887-88 | 31,421,559 | 1,274,476 |
| 1889-90 | 53,390,153 | 2,478,826 |
| 1891-92 | 58,100,283 | 2,368,140 |

| | From United States. | Russia. |
|---|---|---|
| | Gals. | Gals. |
| 1881-82 | 8,493,345 | — |
| 1884-85 | 26,026,508 | — |
| 1887-88 | 25,038,620 | 5,035,785 |
| 1891-92 | 27,163,793 | 28,333,635 |

| Year. | Quantity of Gold extracted. | Net value. | Royalty paid to the Mysore State. |
|---|---|---|---|
| | Oz. | Rx. | Rx. |
| 1887 | 15,403 | 82,704 | 4,135 |
| 1888 | 35,034 | 1 3,059 | 9,652 |
| 1889 | 78,649 | 439 315 | 21,965 |
| 1890 | 108,621 | 577,973 | 27,000 |
| 1891 | 130,429 | 702,265 | 35,113 |
| 1892 | 163,138 | 98 ,770 | 49,038 |

## FACTORIES.

FACTORIES.

The development of handicrafts into industrial enterprise on a larger scale is a task that in India has to struggle against more difficulties than the exploitation of the mineral resources of the country, since social prejudices have to be taken into consideration, in addition to the physical conditions. Mining on the scale and by the methods introduced by foreign management, is a complete innovation, and having a blank page to work on, had only to initiate a groove into which the required contingent of the mass of unskilled labour could be diverted, and which it could be trusted to follow under proper training and supervision. Skilled industry, on the other hand, has prevailed for generations throughout the community, and, like everything else in India, has been crystallised into traditional forms, indissolubly bound up with the social system.

From the earliest days following the Aryan settlement in India of which any historical trace can be discovered, the handicraftsman has been relegated to an inferior social grade compared to that occupied by the professions of war and religion, by agriculture and by trade. It was owing to the development of the

FACTORIES.

needs of the gradually expanding community that the class termed by the Brahmanic leaders of Aryan civilisation the Shudra, or menials, arose from amongst the mass of the agricultural colonists, and the structure of the village community to this day, wherever it has been maintained in a more or less complete shape, most clearly indicates that the function of the artisan was to minister to the needs of the lords of the soil. Thus, every village tended to become self-supporting. The carpenter, weaver, potter, oil-presser, blacksmith, and goldsmith, are integral portions of the village community. The leather-worker is attached to the same body in another capacity, that of helot, and lives outside the village site, properly so-called, in a contiguous hamlet. It is out of place to follow the evolution, as wealth spread, of the finer handicrafts for which India became famous in later centuries, but there is no doubt that the system of indissoluble hereditary bondage of a family to a single means of livelihood had as much to do with the perfection of the method employed as with the isolation of the worker, and the suppression of the co-operative spirit, which, by the specialisation of separate branches of an industry, alone renders enterprise on a large scale practicable. Such enterprise, indeed, is really the product of the present generation. It has had beyond a doubt an appreciable effect on two or three sections of the rural artisan community who formerly had the monopoly of the village market, but, on the other hand, the rest have hitherto successfully defied competition, and, in the present conditions of Indian life, are likely to do so for years to come. In a previous chapter it has been explained that in many, if not most cases, the village functionary is remunerated not in cash, but either by a grant of the village land, or by an annual contribution of the produce of each holding. It is difficult, therefore, for outsiders to undersell the carpenter, or the potter, or the goldsmith. But it is different in the case of the oilman and the weaver. In the previous section of this chapter it was shown how rapidly the importations of mineral oil are increasing, so that evidently the locally made vegetable illuminant is being displaced by the cheaper but more dangerous foreign product. The oilman, however, is usually a man of resources, and if he has not enough land to live on, he possesses cattle, which he either lets out to ply for hire, or utilises in a tour to select or collect for the foreign market the seeds that he used to employ in domestic manufacture. The resources of the weaver are more restricted. He often has land, but his traditional employment unfits him for tillage, so, in some parts of India at least, he lets his plot to others, and lives on the rent thereof. But, to look at his case from another point of view, it is by no means certain that the vast importations of cotton yarn and piece goods from abroad, and the increasing production of such commodities in India, with which we shall have to deal immediately, have had the detrimental effect upon the home-weaver that is often presumed to have been the case. Something will be found on this matter in the concluding chapter of this review, in which the general condition of the various classes is considered. It is proved from the old records that at least a hundred years ago the weaver was the first class to feel the pinch of famine in a season of severe drought, and this was long before the competition of European goods had become a material factor in the situation, as England itself, the great exporter of cotton fabric, had not then got out of the Luddite stage of its industrial history. Then, again, the returns of inland trade show the very large and brisk movement of yarn from the places of import or manufacture to the interior. In 1891–92, for instance, twist and yarn entered the provinces to the value of Rx. 4,068,830 in excess of the value of that which left them, so, as some use was probably found for the surplus, it is safe to assume that the home worker has discovered that by weaving by hand the superior yarn he can get from the factories, he produces a fabric that meets with favour in the eyes of his customers of the village in regard to its price, strength, and durability. In concluding these general remarks on what is at present, as it has always been, the principal handicraft of India, it must be reiterated that in the eyes of Indian society there is a certain degradation attached to the occupation of working in either textiles or leather, so that, as an outlet for the surplus population now thrown upon the land, the development of these industries cannot be regarded, save in very exceptional circumstances, as likely to benefit more than the lower labouring and the menial classes, and will not affect the class that looks solely to the occupancy of land for its living.

Oilmen and Weavers.

Cotton Mills.

We pass on now to the textile industries, so far as they have been developed into

into what may be called factories, and may begin with cotton, as the most important. In 1891–92 there were 127 cotton mills in India, of which 87, as stated in the last chapter, were in Bombay. The first mill was started in 1851. In 1878 there were 58; nine years later, 97; and in 1890–91, 125. The marginal table gives the main figures for the last 10 years regarding these factories. The statement of the capital employed is admittedly approximate only, as often the return for one or two mills is not published in time to be incorporated in the general table. The number of hands employed is insignificant, compared to the masses of labour available. As regards the distribution of the mills, the Bombay Presidency includes 65 in the capital and 22 in the interior. In Madras town there are four, and six elsewhere in the Presidency. The eight in Bengal are all in or near Calcutta. Three of the four in the North-west Provinces are in Cawnpore. In the Panjab, Delhi has two at work. The Central Provinces have four, and the rest are scattered over the rest of the country. The comparison between the spread of locally-made fabrics and yarns and that of foreign manufactures belongs more properly to the subject of trade, as the imports of the two together constitute about 47 per cent. of the total value of the trade in that direction. But a few lines here on this point will not be out of place. Unfortunately, the output of the local mills cannot be given, as no return is available on the subject, so the relative spread of the internal demand must be ignored.

FACTORIES.

| | Number of Mills. | Appproximate Capital Invested. | Number of | | |
|---|---|---|---|---|---|
| | | | Hands. | Looms. | Spindles. |
| | | Rx. | | | |
| 1881–82 | 62 | 6,847,100 | 52,231 | 14,386 | 1,550,944 |
| 1882–83 | 62 | 6,645,200 | 53,624 | 15,116 | 1,654,108 |
| 1883–84 | 74 | 8,107,700 | 61,836 | 16,251 | 1,895,284 |
| 1884–85 | 81 | 8,221,700 | 61,596 | 16,455 | 2,037,055 |
| 1885–86 | 89 | 8,484,900 | 71,577 | 16,548 | 2,198,545 |
| 1886–87 | 90 | 8,209,500 | 72,590 | 16,926 | 2,202,602 |
| 1887–88 | 97 | 8,996,500 | 80,515 | 18,840 | 2,375,739 |
| 1888–89 | 108 | 9,536,600 | 92,126 | 22,156 | 2,670,022 |
| 1889–90 | 114 | 10,157,800 | 99,224 | 22,078 | 2,934,637 |
| 1890–91 | 125 | 10,005,300 | 111,993 | 23,845 | 3,197,740 |
| 1891–92 | 127 | 12,000,000 | 117,922 | 24,670 | 3,272,938 |

The following table, however, shows that, as compared with 1880–81, the imports of piece goods have not risen of late years at the same rate as might be expected if the demand had continued on the former scale.

| | Imports from Abroad. | | Exports of Indian Manufacture. | | Proportional Variation, 1880–81 = 100. | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Twist and Yarn. | | Piece Goods. | |
| | Twist and Yarn. | Piece Goods. | Twist and Yarn. | Piece Goods. | Foreign Imports. | Indian Exports. | Foreign Imports. | Indian Exports. |
| | Lbs.* | Yards.* | Lbs.* | Yards.* | | | | |
| 1880–81 | 45,877 | 1,776,507 | 26,901 | 30,385 | 100 | 100 | 100 | 100 |
| 1881–82 | 40,762 | 1,624,452 | 30,786 | 29,890 | 89 | 114 | 91 | 98 |
| 1882–83 | 44,859 | 1,642,800 | 45,378 | 41,534 | 98 | 169 | 92 | 137 |
| 1883–84 | 45,379 | 1,724,096 | 49,877 | 55,564 | 99 | 185 | 97 | 183 |
| 1884–85 | 44,799 | 1,734,098 | 65,897 | 47,908 | 98 | 245 | 98 | 158 |
| 1885–86 | 45,915 | 1,743,378 | 78,242 | 51,528 | 100 | 291 | 98 | 170 |
| 1886–87 | 49,014 | 2,155,713 | 91,804 | 53,360 | 107 | 341 | 121 | 176 |
| 1887–88 | 51,542 | 1,839,118 | 113,451 | 69,435 | 112 | 422 | 103 | 228 |
| 1888–89 | 52,587 | 2,126,553 | 128,907 | 70,244 | 115 | 479 | 120 | 231 |
| 1889–90 | 46,382 | 1,997,233 | 141,950 | 59,462 | 101 | 528 | 112 | 196 |
| 1890–91 | 50,971 | 2,014,443 | 169,275 | 67,639 | 111 | 629 | 113 | 223 |
| 1891–92 | 50,404 | 1,882,884 | 161,253 | 73,351 | 110 | 599 | 106 | 241 |

* In thousands.

Almost the same may be said about the movements of twist and yarn. On the other hand, the exports of the latter, made in India, have advanced to about six times the quantity sent out in 1880–81, though, if we were dealing with the period that has elapsed since the close of the year with which this review concludes, the prospects might not be so favourably set forth. The exports of piece goods of the same class have also more than doubled.

FACTORIES.

Jute.

The next industry to come under notice is that of jute, which is practically confined to Calcutta and a few other places in Bengal. The first mill was established in 1857, but most date from 1874 downwards. The following table, on the same lines as that given above in the case of cotton mills, shows the chief statistical facts connected with this enterprise, which is one of the most important in the country.

| YEAR. | Number of Mills. | Approximate Capital Employed. | Number of | | |
|---|---|---|---|---|---|
| | | | Hands. | Looms. | Spindles. |
| | | Rx. | | | |
| 1881–82 - - - - | 21 | 2,310,380 | 40,551 | 5,655 | 90,755 |
| 1882–83 - - - - | 20 | 2,337,000 | 42,797 | 5,633 | 95,737 |
| 1883–84 - - - - | 23 | 2,507,000 | 47,868 | 6,139 | 112,650 |
| 1884–85 - - - - | 24 | 2,697,000 | 51,902 | 6,926 | 131,740 |
| 1885–86 - - - - | 24 | 2,697,000 | 47,640 | 6,683 | 126,964 |
| 1886–87 - - - - | 24 | 2,847,000 | 49,015 | 6,911 | 135,593 |
| 1887–88 - - - - | 25 | 3,044,500 | 56,007 | 7,389 | 146,302 |
| 1888–89 - - - - | 26 | 3,019,500 | 59,722 | 7,819 | 152,667 |
| 1889–90 - - - - | 27 | 3,021,500 | 60,630 | 8,104 | 158,326 |
| 1890–91 - - - - | 27 | 3,132,000* | 62,739 | 8,204 | 164,245 |
| 1891–92 - - - - | 27 | 3,132,000* | 66,333 | 8,695 | 174,156 |

* Probably nearer Rx. 3,400,000.

The returns of trade show that the progress of the export of the manufactured article has been more rapid than that of the raw material. The marginal table, which gives the figures in their proportional form with reference to those of 1880–81, as above, speak for themselves. Though the claim occasionally heard, that Dundee has been transported to the banks of the Hughli, may not be more than a hyperbole licensed by the poetry of commerce, still there is little reason why it should not ultimately become a fact in the jute trade that the fibre is worked up within easy distance of the place of production into the form in which it is to be used. The low prices of 1890–91 resulted in a considerable contraction of the area placed under the fibre in the succeeding year, but the prices of 1891–92 were the highest known, and the export of the manufactured article continued its upward course.

| YEAR. | Jute Exports. | | | |
|---|---|---|---|---|
| | Raw Jute. | | Manufactured Jute. | |
| | Quantity. | Price. | Quantity. | Price. |
| 1880–81 - - - | 100 | 100 | 100 | 100 |
| 1881–82 - - - | 129 | 128 | 80 | 97 |
| 1882–83 - - - | 178 | 149 | 127 | 131 |
| 1883–84 - - - | 121 | 117 | 121 | 118 |
| 1884–85 - - - | 144 | 115 | 158 | 136 |
| 1885–86 - - - | 134 | 111 | 123 | 100 |
| 1886–87 - - - | 143 | 124 | 123 | 102 |
| 1887–88 - - - | 166 | 153 | 142 | 154 |
| 1888–89 - - - | 182 | 201 | 190 | 227 |
| 1889–90 - - - | 176 | 220 | 186 | 247 |
| 1890–91 - - - | 206 | 193 | 188 | 219 |
| 1891–92 - - - | 147 | 174 | 203 | 222 |

Miscellaneous Factories.

Amongst other nascent industries must be mentioned that of paper-making, which is flourishing in Bengal, and making way in Poona, Lucknow and Gwalior. There are now eight mills, employing about 2,700 hands, with something under half-a-million of capital engaged. The outturn and variation is increasing annually, and the quality is improving. It is worth mentioning that the whole of the paper, amounting to something over 300 tons, required for the last census, was supplied by local firms. There is also a sign of interest in woollen and leather manufactories. Clothing for the police and native soldiery is being more and more obtained from the mills at Cawnpore, Dhariwal and Bombay. The miscellaneous concerns that are in operation are numerous. Out of a total of about 1,400, nearly 400 were cotton presses, 274 saltpetre-factories, and 76 aërated-water concerns. Rice-mills and indigo factories numbered

numbered 54 and 55 respectively. The silk industry is confined to a few large concerns in Bombay and Calcutta, and to minor establishments in the interior of Bengal. The average number of persons employed in these undertakings is considerable, but the return is not complete, and the same remark applies to them as to the cotton industry, that in spite of the great actual increase in the number, the proportion of the latter to the total that might profitably be diverted to such means of gaining their livelihood is insignificant. At the same time, the prospect of all the more important of the industries that have been mentioned above is favourable, and with the improvement in the coal supply, may be expected by 1901–2 to show a very material increase in their sphere of action. FACTORIES.

In concluding this subject a few words are necessary regarding the legislative regulation of labour in factories, a matter which has been under discussion during the latter portion of the decade. The conditions under which the Indian factory hand labours are, as may be easily supposed, substantially different from those by which his compeer in the temperate zone is affected. To prevent abuses, however, an Act was passed in 1881 on the subject, and since the ensuing year the amendment of the provisions has been frequently under consideration. A Commission was appointed to inquire into the matter in 1890, and on the report that resulted from their investigations an amending Act was passed in 1891. The enactment in question did not come into operation until the beginning of 1892, so no review of its results can be given in this work. The principal modifications effected under it, however, may be stated. In the first place, the number of hands employed which bring a concern under the definition of a "factory" was reduced by one-half, or from 100 to 50, with a special provision for action with regard to those places which might be found to require inspection or regulation, though they employed no more than 20 hands. Then, the hours of employment for women were reduced to eleven, and in factories where a system of shifts is not in force, women are prohibited from working before 5 a.m. and after 8 p.m. In respect of children, the prohibition of work before and after those hours is absolute. Rules for intervals of rest formed part of the scheme. The minimum age of employment of children was raised from seven to nine, and the definition of "child" was modified, so that it now includes persons under 14 instead of those under 12 only. It is also enjoined, finally, that children should be employed for no more than seven hours daily. There are other provisions in the Act regarding Sunday labour, intervals of rest for men, as well as for women, water supply, ventilation, cleanliness, and other sanitary precautions. In order to see that the provisions of the Act are observed, two Inspectors are appointed, whereof the one has charge of Bombay and the Central Provinces, and the other Bengal and the North-West Provinces. The Bombay report states that under the former Act children were more largely employed than before, that the number of accidents was much the same as in the preceding year, that the inspections were duly carried out, and that no prosecutions were found necessary in the case of any of the 115 establishments inspected. It may be mentioned that in consequence of a temporary depression in trade there was a compact made by the Bombay Mill Owners Association to close for eight days in every month for about a quarter of the year, after which operations regained their normality. The local inspection of boilers, &c., resulted in no incidents out of the common.

## CHAPTER XV.

## TRADE AND COMMERCE.

TRADE AND COMMERCE.

THERE are few, if any, of the wider subjects with which this review is concerned that are furnished with so complete a statistical background as that of the general trade of India, more especially the section of it that is carried on by sea with foreign countries. The elaborate series of returns in which information on this important topic is to be found have been systematically prepared on a uniform plan for a much longer period than is usually accompanied by this desirable condition in cases where the administration, as in India, is obliged by circumstances which it has to some extent to mould by its initiative, to be continually enlarging its sphere of action and survey. The statistics themselves, moreover, have the advantage of passing every year through the hands of an expert whose attention is mainly devoted to the subject, and his review of the annual transactions represented by them is reproduced and presented to the Houses of Parliament. It is superfluous, accordingly, to dwell at length on the matter in this review, great as may be the temptation to linger a while in this oasis in the dry plain of Indian statistics. It will be sufficient, therefore, if only the chief features of this trade be discussed, so far as they fall within the period with which we are immediately concerned. This period, it must be observed beforehand, stops short of the very peculiar variations that have characterised the past 18 months or so, which have to be dealt with in the review for 1892–93, a return that will follow this decennial number within a few weeks.

It has been hinted above that a distinction may be drawn, in respect to the quality of the returns, between the information regarding the trade by sea and that overland. The latter section has not been brought under systematic registration for more than a few years, and the great increase of railway traffic, the opening of new navigable canals, and difficulties in the way of obtaining a complete record of the trade that comes from the north, either by the Himalayan passes or through the Nipal Tarai, place these returns for the present on a different footing from those of the sea-borne trade. Added to this is the fact that the former are collected and compiled, not in the Department of Finance and Commerce, like the others, but in that of Revenue and Agriculture, from which the returns annually issue without comment, owing to the absence of a trained statistical establishment of a strength to adequately deal with such a mass of detailed matter.

To begin, then, with the sea-borne trade, the following table shows its total value since 1881–82, subdivided according to its direction and the distance from India of the countries with which it is conducted :—

VALUE OF THE TOTAL TRADE OF INDIA.

| HEAD. | 1881–82. | 1883–84. | 1885–86. | 1887–88. | 1889–90. | 1891–92. |
|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Import Foreign | 60,436,155 | 68,157,311 | 71,133,666 | 78,830,468 | 86,656,990 | 84,155,045 |
| Import Coasting | 29,697,618 | 32,854,878 | 32,534,529 | 33,065,700 | 32,589,751 | 37,266,806 |
| TOTAL | 90,133,773 | 101,012,189 | 103,668,195 | 111,896,168 | 119,246,741 | 121,421,851 |
| Export Foreign | 83,068,198 | 89,186,397 | 84,989,501 | 92,148,279 | 105,366,720 | 111,460,278 |
| Export Coasting | 28,523,770 | 31,390,637 | 32,564,979 | 32,458,626 | 31,678,459 | 35,522,052 |
| TOTAL | 111,591,968 | 120,577,034 | 117,554,480 | 124,606,905 | 137,045,179 | 146,982,330 |
| Total Trade Foreign | 143,504,353 | 157,343,708 | 156,123,167 | 170,978,747 | 192,023,710 | 195,615,323 |
| Total Trade Coasting | 58,221,388 | 64,245,515 | 65,099,508 | 65,524,325 | 64,268,210 | 72,788,858 |
| TOTAL | 201,725,741 | 221,589,223 | 221,222,675 | 236,503,072 | 256,291,920 | 268,404,181 |

The meaning of the figures is pretty plain. We may remark, in passing, that the coasting trade has not increased by more than a quarter, whilst that with foreign countries shows an increase of about 36 per cent., and again, that the import trade has grown faster than the export, in both the foreign and the coasting branches. To take the foreign trade separately, its growth will be appreciated from the following table, which starts from the average of the years 1835–40 as a base :—

COMPARISON OF EACH BRANCH OF FOREIGN TRADE WITH THE AVERAGE OF 1835–40 (=100).

| HEAD. | | 1841–42. | 1851–52. | 1861–62. | 1871–72. | 1881–82. | 1891–92. |
|---|---|---|---|---|---|---|---|
| Imports | Merchandise | 157 | 246 | 449 | 646 | 988 | 1,397 |
| | Treasure | 78 | 215 | 638 | 494 | 483 | 628 |
| | *Total* | *132* | *236* | *509* | *597* | *826* | *1,150* |
| Exports | Merchandise | 125 | 179 | 328 | 571 | 740 | 977 |
| | Treasure | 205 | 366 | 272 | 588 | 438 | 1,309 |
| | *Total* | *127* | *184* | *327* | *571* | *734* | *984* |
| Total Trade | Merchandise | 135 | 200 | 241 | 594 | 817 | 1,107 |
| | Treasure | 91 | 230 | 602 | 503 | 479 | 694 |
| | *Total* | *129* | *204* | *399* | *582* | *770* | *1,050* |

The import trade, as compared with that of the period taken as a standard, has increased elevenfold, or, if the 50 years only be considered, where 100 rupees' worth was imported in 1841–42, there was 874 rupees' worth brought into the country in 1891–92. The exports have grown less rapidly, and show but just under tenfold in the first case, and about 777 to 100 in the other. The treasure transactions, however, may as well be excluded, owing to the speculative ventures of the last few years. The results then are, that for every 100 rupees' value imported at the beginning of Her Majesty's reign, India now imports nearly 1,400, whilst for the same value exported, the corresponding figure is 977. Limiting the case to the half-century, the final figures, those for 1891–92, will be found to be 891 and 782, respectively, for imports and exports. There is another point, also, in which this table is instructive, and that is, the relation between the two sections of inward and outward trade. This is not a matter with which it is proposed to deal in this review, as it has been so often investigated elsewhere, but it may be observed that the ratio of the excess of exports over imports, taking treasure into the calculation, has decreased in the 50 years by over a third. The great leaps, it appears, have been, in the case of both branches of trade, in the fifties and eighties. Counting treasure, the large importations between 1851 and 1861 disturb this sequence in that branch of trade, but in both instances the transactions between 1881–82 and 1891–92 show the largest proportional increase of any of the decades. The marginal note deals with this period alone. The upward course of both imports and exports is well marked, but it is more pronounced in the case of the former. As to the balance of trade, the average of the decade gives about 22 per cent. in favour of India, with, as it appears, a slight falling tendency. It may be remembered that the fluctuations of exchange with countries having a gold standard were abnormal in 1890–91, leading to a complete dislocation of the course of trade. Throughout 1891, however, the rupee pursued its downward flight, to the extent of some 12 per cent., varied by occasional, but very slight, fluctuations. Thus, in the former year the importation of bullion as well as merchandise increased very largely, and exports held back, whilst in the last year with which we are dealing, the latter, both of goods and bullion,

| YEAR. | Merchandise. | | Percentage of Exports of Merchandise over Import of all kinds. |
|---|---|---|---|
| | Imports. | Exports. | |
| 1881–82 | 100 | 100 | 38 |
| 1883–84 | 112 | 107 | 31 |
| 1885–86 | 110 | 102 | 20 |
| 1887–88 | 133 | 110 | 17 |
| 1889–90 | 142 | 126 | 22 |
| 1891–92 | 142 | 132 | 34 |

TRADE AND COMMERCE.

were stimulated, and imports languished. The strong demand for Indian wheat in Europe somewhat helped to restore the balance, but, on the whole, the trade suffered a considerable check, and the imports are much as they were in 1889–90, instead of continuing at their former rate of expansion.

Shipping.

The next point to treat of here is the component parts of the two branches of trade, but before taking up this it is as well to devote a small space to the figures relating to the shipping engaged in the foreign trade. The following table gives the principal features of the variation since the opening of the Suez Canal.

VESSELS ENGAGED IN FOREIGN TRADE.

| YEAR. | TOTAL. | | | | PROVINCIAL DISTRIBUTION. | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Entered. | | Cleared. | | Tonnage of Vessels Entering. | | | | |
| | No. | Tonnage. | No. | Tonnage. | Bombay. | Sindh. | Bengal | Madras. | Burma. |
| 1868–69 | 5,639 | 2,185,961 | 5,904 | 2,251,310 | 830,585 | * | 668,011 | 404,364 | 260,630 |
| 1871–72 | 6,138 | 2,282,853 | 6,401 | 2,363,244 | 632,100 | * | 802,023 | 493,372 | 359,753 |
| 1875–76 | 6,259 | 2,629,9..3 | 6,201 | 2,842,158 | 721,081 | * | 814,043 | 582,225 | 512,574 |
| 1879–80 | 6,072 | 2,763,621 | 6,088 | 2,939,466 | 725,990 | 141,568 | 856,192 | 528,731 | 511,140 |
| 1881–82 | 6,460 | 3,631,248 | 6,282 | 3,736,638 | 1,053,324 | 126,738 | 1,142,018 | 593,703 | 716,465 |
| 1885–86 | 5,253 | 3,640,637 | 5,301 | 3,653,902 | 1,140,368 | 267,462 | 933,092 | 671,744 | 628,061 |
| 1889–90 | 5,282 | 3,658,181 | 5,391 | 3,657,405 | 1,081,615 | 268,198 | 965,053 | 689,363 | 643,652 |
| 1891–92 | 5,686 | 4,308,375 | 5,472 | 4,282,276 | 1,384,205 | 401,830 | 950,087 | 858,733 | 713,520 |

* Included under Bombay.

The only point to notice specially is the growth of the tonnage. In 1868–69 the average was about 379 per vessel entering, whilst in 1891–92 it had risen to 758, or more than doubled.

We now turn to the figures relating to the principal articles of trade. It is desirable, in considering these, to exclude the transactions of the Government in regard to stores and treasure, and to consider only the private trade. The following table shows the values of the goods in question at three periods in the decade. In the two last columns the ratio of the middle and the last years respectively to the first is given.

VALUE OF CHIEF ARTICLES OF PRIVATE MERCHANDISE.

| | 1881–82. | 1886–87. | 1891–92. | As compared with 1881–82 = 100. | |
|---|---|---|---|---|---|
| | | | | 1886–87. | 1891–92. |
| A.—IMPORTS. | Rx. | Rx. | Rx. | | |
| *Total Imports* | *58,314,865* | *69,714,781* | *81,310,119* | *119* | *139* |
| 1. Cotton Piece-goods | 20,422,860 | 25,355,795 | 24,591,120 | 124 | 120 |
| 2. Cotton Twist and Yarn | 3,222,065 | 3,318,377 | 3,514,619 | 103 | 109 |
| 3. Hardware | 626,613 | 865,397 | 1,238,994 | 138 | 198 |
| 4. Iron | 1,414,384 | 1,782,990 | 2,321,284 | 126 | 164 |
| 5. Tin | 160,715 | 267,878 | 264,331 | 136 | 142 |
| 6. Copper | 1,467,462 | 1 994,008 | 2,089,024 | 158 | 156 |
| 7. Coal | 979,932 | 1,241,887 | 1,213,403 | 127 | 124 |
| 8. Precious Stones | 294,890 | 151,030 | 142,364 | 51 | 48 |
| 9. Mineral Oil | 439,458 | 1,216,607 | 2,200,966 | 277 | 501 |
| 10. Raw Silk | 749,211 | 789,702 | 1,263,007 | 105 | 168 |
| 11. Silk Piece goods | 1.106,048 | 1,162,074 | 1,453,407 | 105 | 131 |
| 12. Woollen „ | 1,121,097 | 1,528,865 | 1,762,031 | 136 | 157 |
| 13. Refined Sugar | 1,242,189 | 2,054,641 | 2 516,803 | 165 | 203 |
| 14. Salt | 569,067 | 768,987 | 627,953 | 135 | 110 |
| 15. Wine, Beer, and Spirits | 1,308,672 | 1,459,773 | 1,442,095 | 111 | 101 |
| 16. *Gold* | *4,856,392* | *2,833,558* | *4,118,939* | *58* | *85* |
| 17. *Silver* | *6,466,389* | *8,219,761* | *10,603,733* | *127* | *164* |

VALUE OF CHIEF ARTICLES OF PRIVATE MERCHANDISE—*continued.* TRADE AND COMMERCE.

| | 1881–82. | 1886–87. | 1891–92. | As compared with 1881–82 = 100. | |
|---|---|---|---|---|---|
| | | | | 1886–87. | 1891–92. |
| B.—EXPORTS OF INDIAN PRODUCE. | | | | | |
| *Total Exports* | *82,999,346* | *90,113,171* | *111,179,196* | *109* | *134* |
| 1. Raw Cotton | 14,935,959 | 13,468,429 | 10,754,312 | 90 | 72 |
| 2. Cotton Piece-goods | 554,829 | 878,288 | 1,132,182 | 158 | 204 |
| 3. Cotton Twist and Yarn | 1,368,836 | 3,336,861 | 5,771,033 | 244 | 422 |
| 4. Hides and Skins | 2,029,819 | 2,811,291 | 2,367,043 | 138 | 117 |
| 5. Raw Wool | 814,551 | 899,552 | 1,013,864 | 110 | 124 |
| 6. Manufactured Wool | 196,683 | 85,932 | 94,788 | 44 | 48 |
| 7. Opium | 12,432,142 | 11,077,669 | 9,562,261 | 89 | 77 |
| 8. Tea | 3,609,136 | 4,727,992 | 5,968,129 | 131 | 165 |
| 9. Oilseeds | 6,054,099 | 9,198,560 | 12,208,458 | 152 | 202 |
| 10. Raw Jute | 5,030,302 | 4,869,815 | 6,848,493 | 97 | 136 |
| 11. Manufactured Jute | 1,096,027 | 1,151,858 | 2,513,100 | 105 | 229 |
| 12. Wheat | 8,604,081 | 8,625,864 | 14,380,462 | 100 | 167 |
| 13. Husked Rice | 8,249,577 | 8,764,809 | 13,296,792 | 106 | 161 |
| 14. Millets, &c. | 108,640 | 187,748 | 491,306 | 173 | 452 |
| 15. *Gold* | *12,408* | *656,493* | *1,705,137* | – | – |
| 16. *Silver* | *1,037,339* | *1,064,023* | *1,438,049* | 98 | *145* |

Here we find the increase in the value of the imports to be 39 per cent. over that in 1881-82, but as compared with the year 1890-91 there was a decrease of 3·5 per cent. In reviewing the detail, Mr. O'Conor points out that the increased values of several of the articles does not counterbalance the fall in those of such important goods as railway material, cotton manufactures, sugar, and a few others. Especially as regards the predominant article under the head of cotton manufactures, namely, grey shirtings, does he show that the prices in the Calcutta market stand lower than they have done for 20 years. It is not worth while, however, discussing the details of this single year, because the returns for the succeeding year have superseded them, and show the fall to have continued long beyond the period with which this review has to deal. The general course of the 10 years, therefore, is what is in question. Taken from this standpoint, the table shows a very marked increase in the value of certain goods which may be taken to denote an increased purchasing power or a higher standard of living. For instance, there is a noteworthy increase under the heads of refined sugar, of raw silks, of woollen fabrics, and of the metals which experience has shown to be in greater demand throughout the middle and lower classes, according to the improvement in their material circumstances, one mark of which is the substitution of brass or copper for earthenware in the household cooking, drinking, and similar utensils. There is also to be noted the astonishing increase in the importations of mineral oil, of which mention was made in the last chapter. Other items will be seen in the list to have increased to a somewhat less degree. In connection with the bad trade mentioned in the preceding paragraph, again, it may be observed that in comparison with 10 years ago there is no article of general use that shows any falling back. Even cotton piece-goods are 20 per cent. in advance, whilst the relatively slow rate of increase in the case of coal and salt has received an explanation in the foregoing portions of this work. Imports.

Before leaving the part of the table that is concerned with imports, it is worth while to add a few lines as to the countries from which India receives its supply of the goods selected for mention in the return. To begin with, the class of goods that furnish some 43 per cent. of the total imports of merchandise, it seems that the United Kingdom supplied 99 per cent. of the Piece-goods in 1881, and 98 in the last year of the decade. Countries exporting to India.

TRADE AND COMMERCE.

Italy and Holland are her competitors at a vast distance. Twist and Yarn show but a slow progress, possibly owing to the great increase in the local out-turn mentioned in connection with the factories in the last chapter. The United Kingdom maintains its position, however, with from 97½ to 98 per cent. of the trade, Austria being the nearest to it, with from 1¼ to 1½ per cent. As to Hardware, which is the next article in the table, the case is somewhat different, for it appears that though the mother country sends by far the greater portion of the imports, instead of the 96 per cent. credit to her 10 years back, she has now but 83. Germany has suddenly come up to 6, and Belgium to 4 per cent., neither of these two being found in appreciable amounts in the earlier returns. Austria, again, has risen from less than ¾ to over 3½ in the 10 years. Like hardware, Iron has largely increased as an article of import in the decade. The United Kingdom accounts for 82 per cent., instead of over 99. Belgium is the competitor of most note, with 16¾ per cent., and has risen into notice since 1881. It has also entered into the race as to Copper, though here it is below Hong-Kong, with 14½ per cent., and Australia with 4. The United Kingdom still holds three-fourths of the trade in this article. Tin, on the other hand, comes almost exclusively from the Straits Settlements, and England sends only 2½ per cent. Coal requires but little comment. England sends 97 per cent., as it did 10 years ago, and Australia shows a rather reduced supply. The unmanufactured jewelry that is the only article of merchandise that shows a falling off, from the figures of 1881-82, consists almost entirely of pearls from the Persian Gulf, so the trade is naturally in sympathy with the season, and the latter is very uncertain. Next comes Mineral oil, which is supplied almost entirely by the United States and the Caspian works. The latter has but recently entered the market, but in 1891–92 the cheapness of the product, which appears to have an attraction beyond that of quality, raised the imports to more than those from the western hemisphere, which had previously supplied about 93 per cent. of the whole. Raw silk is almost entirely from Farther India and China. It has risen from Rx. 750,000 to Rx. 1,263,007 in the 10 years. In the case of Silk piece-goods, the United Kingdom returns 46 per cent. and Hong-Kong 35. France shows a considerable falling-off. Three-fourths of the Woollen fabrics that reach India are from the mother-country, but 10 years ago her share was 94 per cent., and Germany and Austria have appropriated the bulk of the difference. Mauritius still supplies two-thirds of the Refined Sugar, the import of which has doubled in the decade, but within five years that island sent three-fourths. Germany is again the chief rival, and Hong-Kong, too, with Java and the Straits Settlements, supplies the rest, but their share is not what it was before Hamburg stepped in. In the matter of Wine, Spirits, and fermented liquor, England and Scotland account for 81 per cent., against 88 previously. France sends 8 per cent., against 7½ ten years back. Germany and Belgium are both gaining. The importations of gold and silver necessarily vary a good deal from year to year, according to exchange, and the trade of the year with the country owing a debt to India. The United Kingdom supplies, as a rule, the bulk of the gold, though Australia exceeded it in 1881–82, and Hong-Kong approached it unusually near in 1891–92. More than half the white metal imported in the decade has been from the mother-country, but China, and, on several occasions, the United States, have joined in the trade to a considerable extent. The former remitted 23½ per cent. in the last year quoted, and the States sent, in 1886–87, 8¾ per cent. of the imports of that year.

Exports.

We pass on to the exports. These are, as might be expected, more varied than the trade in the other direction. The first place was taken in 1891–92 by *wheat*, which generally alternates with *rice* in that position. The third in order is also one of the great agricultural products of the country, namely, *oilseeds*. *Raw cotton* comes next, and *opium* stands fifth. The sixth and seventh places are occupied by *jute* and *tea* respectively. Last of the larger items come the local manufactures of cotton twist and yarn, and those of jute, sacking, and gunny bags, &c. It will be noticed that, of the above nine, the exports of the two last-mentioned articles, and of oilseeds, have more than doubled in the 10 years. The same can be said of cotton piece-goods

goods of Indian make, though this class at present counts for little in the general mass of exported merchandise. We find, too, that a rise of over 60 per cent. in the value has taken place in the case of wheat, rice, and tea. The millets that are now going abroad show a remarkably extensive and rapid rise, and the only important items in the list that show a decrease are opium and raw cotton. The former has gone down by some 23 per cent., and the latter by 28. Both have been noticed in former chapters. Raw jute and wool, as well as hides and skins, all show a considerable rise of between 17 and 36 per cent., though it is somewhat below that of the export trade as a whole. As compared with the year 1890–91, the last year of the decade shows an increase of nearly 8 per cent., due almost entirely to larger exports of grain, pulse, and oilseeds. The greatest decline was in raw cotton, the result of a bad season, and, for the first time in the history of the trade, the demand for twist and cotton piece-goods materially slackened. The aggregate export trade increased by Rx. 7,649,000; whilst the rise in the value of exported grain and pulse amounted to Rx. 9,156,000. The demand for both rice and wheat, however, especially the latter, is a very fluctuating one, as will be seen from the marginal table. Rice took a fresh start in 1890–91, previous to which year the exports had practically been stationary for seven years. A failure of the crop in Japan gave the required stimulus in that year, and a similar calamity in Europe, combined with a special demand in India, raised the value of the Burma supply. As regards the wheat, there seems to be a normal demand of something a little below a million tons, round which the export flutters according to the state of the American or Russian market. There is no apparent correspondence between the exports and the rate of exchange. A new development of this trade may be mentioned, namely, the exportation of wheat-flour, which has nearly doubled in the last five years. Most of the supply is taken by Belgium. Of oilseeds, the chief is linseed, with rape and sesamum a good way behind it. As a rule, the value of this class of produce is in excess of that of wheat, but in 1891–92 the latter got ahead, though the linseed and rape, which are often grown with it, shared in the favourable results of the season. Raw cotton was depressed in 1891–92, as mentioned above, by a bad season in India, but there was also a particularly good crop in the United States, which cut the Oriental staple out of the European market. The distribution of this product has been mentioned in preceding chapters. Jute was affected in 1890–91 by speculation. The only large market for this fibre is Calcutta, where, as was stated in the last chapter, a wave of general speculation seems to have set in in the year just mentioned, and jute being plentiful, and exchange on Europe rising, there was a considerable fall a little later, and exports receded from the highest on record to the quantities of five years back. Opium and tea need no comment beyond that they have already received elsewhere. Cotton yarn of Indian make, which is chiefly taken by China and Japan, rose in exported amount from 45,378,000 lbs. in 1882–83 to 169,275,000 lbs. in 1890–91, and ended the decade at 161,253,000 lbs. Cotton piece-goods made in India have advanced in the same direction, but irregularly. The number of yards exported in 1882–83 was 41,530,000, and in 1891–92, 73,350,000, the highest touched.

| YEAR. | Wheat. | Rice. |
|---|---|---|
| | *Cwt.* (000 omitted.) | *Cwt.* (—000) |
| 1874–75 | 1,074 | 16,941 |
| 1875–76 | 2,511 | 20,000 |
| 1876–77 | 5,587 | 19,549 |
| 1877–78 | 6,373 | 11,212 |
| 1878–79 | 1,057 | 20,634 |
| 1879–80 | 2,201 | 21,909 |
| 1880–81 | 7,444 | 26,769 |
| 1881–82 | 19,863 | 28,519 |
| 1882–83 | 14,144 | 31,029 |
| 1883–84 | 20,956 | 26,832 |
| 1884–85 | 15,831 | 21,702 |
| 1885–86 | 21,060 | 27,814 |
| 1886–87 | 22,263 | 26,460 |
| 1887–88 | 13,538 | 28,149 |
| 1888–89 | 17,610 | 22,768 |
| 1889–90 | 13,709 | 26,774 |
| 1890–91 | 14,320 | 34,474 |
| 1891–92 | 30,397 | 32,740 |

We can now add a little information as to the destination of the above exports, in so far as this has not been already done in previous portions of this review.

Countries importing from India.

Beginning with the article of most importance in the later years of the period in question, we find that wheat has varied very considerably in its distribution since 10 years ago. At that time the United Kingdom took 46 per cent. of the Indian consignments, France accounted for 27¾, and Belgium for over 13½, Italy came in for about 2 per cent. The consignments that left Bombay and Karachi for Egypt may be disregarded, as the goods

Wheat.

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were not, as a rule, delivered there, but merely rested whilst awaiting the development of the commercial situation in European markets. In 1886-87 the United Kingdom received but 43 per cent., and France 12½, whilst Italy leaped up to 24. In the last year of the decade, when, as before remarked, the demand was abnormally large, the proportion sent to England fell again to 41½. That taken by France recovered to 20¼, Belgium advanced to 14¾, and Italy fell to 3½. The waiting game in Egypt suited the trade apparently, since instead of 5½ per cent. being thus dealt with, no less than 15½ of the exports of wheat took a rest by the side of the canal.

Rice.

Rice, so far as the United Kingdom is concerned, showed the same tendencies. The proportion taken in 1881-82 was 36¼; six years later it was 26⅜; and in 1891-92 only 14½. It is clear, however, that to some extent this result is due to the operations in Egypt, for the rice-trade has taken advantage, even more than the wheat, of the halfway station, and instead of 10 per cent. going to this country, as in 1881-82, 28½ stopped there, for a time at least, eleven years later. The Straits Settlements and Ceylon are the next largest purchasers of rice from Burma and Bengal, but the market is extending considerably. South America, for instance, took 6⅓ per cent. in 1891-92, against 2½ in 1881-82. The relatively small trade in

Millets.

millets with Europe, in the last year dealt with in these returns, was due to the short crop of rye and other coarse grain of Russia and Germany which are used in distillation. It is stated that the experiment was not successful, on the whole, so probably the demand will recede to its former dimensions, and be confined to Aden and the coasts of Africa and Arabia, with the usual supply for miscellaneous purposes to the United Kingdom.

Cotton.

Cotton has been discussed in the preceding chapters. The United Kingdom took only 15 per cent. in 1891, against over 48 in 1881; France has continued steady, with a demand of from 10 to 12 per cent. The greatest changes are found in the exports to Belgium and Germany. The former, from 2½ per cent., rose to 15, and the latter, from 4 to 16¾. Italy, with an average of 13½ per cent., and Austria, with about the same, remained, like France, fairly constant. Japan, it may be noticed, entered the market in 1886–87, to the value of Rx. 235, and the decade closed with what may be considered a token of the approbation of that country, as the demand in 1891 was Rx. 997,082, or 9¼ per cent. on the total, and the rise was carried well on into 1892-93.

Oilseeds.

As to oilseeds, in the first year mentioned, 1881–82, France took 39·93 per cent., and the United Kingdom, 40½. In 1886–87 the former country receded to 35½, whilst England rose to 41⅜, but at the close of the decade France was ahead, with 36¾, and England stood in for 31 per cent. only. Belgium has been steadily increasing the demand, which has risen from 6⅜ to 11¾ per cent. on the total exports. Holland and Germany both stood at about 5½ per cent. in 1891–92, but in the case of the latter the trade is comparatively young. The demand in Italy has increased, though the relative figure has gone back from 5 to 4¾ per cent.

Jute.

Jute exports in 1881–82 went to the United Kingdom to a value amounting to more than 80 per cent. on the total, and 13½ went to the United States. In 1886–87 the first country took 76 per cent., and the latter 15½, whilst Germany made a beginning to the extent of 2·8 per cent. Finally, so far as this decade is concerned, the United Kingdom is returned for 66 per cent. only, whilst Germany appears to be taking the place of the States. Smaller exports of this raw produce are made in rising proportions to France, Italy, and Austria.

Tea, as has been already mentioned, finds its chief market in the mother country, where it now amounts to thrice the imports of the China article. The demand in Persia is rising, and reached 3¼ per cent. in 1891–92, and that in Australia is healthy, though subject to temporary falling off, it is said, owing to financial straits in Victoria, which is the chief consumer of Indian tea.

Hides and Skins.

The trade in hides and skins may well receive a few lines of comment, as its distribution is different from most of the large commodities already mentioned. The figures for 1881–82 show that 58½ of the exports went to the United Kingdom, and 17 per cent. across the Atlantic. Italy took 11½ and

$11\frac{1}{2}$ and France $4\frac{1}{2}$. In 1886–87 the first-named country received but 51 per cent., whilst the States advanced to $22\frac{1}{4}$; the other countries named receded a little, and Germany filled the gap thus caused. In 1891–92 England took no more than 20 per cent., France advanced to $6\frac{1}{2}$, the States to $30\frac{3}{4}$, and Germany from 2 to over 29 per cent. It appears that the smaller articles, chiefly goat-skins, are in demand in the States, and the larger elsewhere. TRADE AND COMMERCE.

We now pass to the articles of Indian manufacture, and first, to cotton piece-goods. These are in demand almost entirely along the coasts of Arabia and East Africa, with a fair trade with Ceylon and the Straits Settlements. In East Africa the demand rose from 18 to 24 per cent. in the decade, whilst that for the countries served through Aden fell from $21\frac{1}{3}$ to 15. There has been a considerable rise, too, in the trade with the China Treaty Ports of late. The reviewer of the Indian trade, however, sounds a note of warning with which previous experience on other occasions has made us only too familiar, namely, that the use of "gruel," or sizing, brings the article into contempt amongst people who judge the cloth first by the difference of weight between the new and the washed garment, and also by the smell. The American goods of this sort either are free from sizing or else are cunningly deodorised before being subjected to the olfactory scrutiny of the East African customer, since they are growing into preference over the Bombay cloth. Indian Cottons.

The twist and yarn made in the Indian factories, on the other hand, holds its own. In 1881–82, 84 per cent. was sent to Hong Kong, and 10 per cent. to Japan. Six years later the Treaty ports entered to the extent of 15 per cent.; the Japan orders amounted to $10\frac{3}{4}$, and Hong Kong drew back by some 13 per cent. In the last year of the series in question, Hong Kong had given way still further, and is credited with only 52 per cent., whilst the Treaty ports took $37\frac{1}{2}$, but Japan, owing to the establishment of new mills, went back to $4\frac{1}{2}$ per cent. There is apparently some ground for a feeling of consolation in Bombay to be found in the rumour that the local factories set up by the imitative Japanese do not perform all that was anticipated of them. Cotton Twist and Yarn.

Finally, we have the jute manufactures. Eleven years ago the bulk went to Australia, with a fair proportion to the Far East, and about $8\frac{3}{4}$ per cent. to the United States. In 1886–87, Australia had withdrawn to $22\frac{3}{4}$ per cent., the States rose to 21, and South America and the United Kingdom entered the market as purchasers. Five years later, and we find the position scarcely changed, so far as these countries are concerned, and Mauritius and Egypt had increased their demand. The gunny cloth, it may be noticed, goes chiefly to the United States, whilst the bags are taken chiefly by Australia, the United Kingdom, the Straits and China. The trade was well maintained up to and for the year beyond the close of the ten years with which we are dealing. Jute Goods.

There remain the exports of the precious metals, including silver with gold. Most of the latter goes to the United Kingdom, with a small fraction to France. Silver is more generally distributed. Nearly half goes, on some occasions, to Ceylon, and that island takes an average of some 40 per cent. The rest of the export trade is very liable to vary from year to year. Aden, for instance, ranges from $2\frac{3}{4}$ to $15\frac{3}{4}$ per cent.; Arabia and Persia from 7 to 11 each. In 1881–82 Mauritius absorbed more than a quarter, but took none at all in the other two years mentioned. Even the United Kingdom takes from $1\frac{3}{8}$ to $8\frac{1}{4}$ per cent. The relation between the imports and exports of gold and silver, however, have been investigated in other papers that were presented to Parliament within or just after the period now under review. The question of whether the amount of treasure now in India is 1,300 millions or 5,100 millions of rupees, between which the estimates seem to range, is not one with which this review need deal. It is enough to point out that within the last 20 years the net amount of treasure that has remained in the country, so far as trade statistics can give information on the subject, is Rx. 200,750,450, of which Rx. 130,980,990, was garnered during the last decade, leaving only Rx. 69,769,460 to have accumulated during the preceding period of the same length. Treasure

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Apart from the year of the great famine of 1877 and in 1885–86, there was no sudden or abnormal fluctuation of imports until 1889–90, which preceded the extraordinary operations of 1890–91, which, in turn, has been followed by equally abnormal exports.

Provincial Distribution.

In connection with the sea-borne trade there are now two points remaining to be mentioned. First, the respective shares of the various Provinces and chief ports; and secondly, those of the principal foreign countries that deal with India. The first matter needs no long comment. The following table

TOTAL PROVINCIAL DISTRIBUTION of FOREIGN TRADE in MERCHANDISE, excluding TREASURE, in thousands of Rx.

| YEAR. | BOMBAY AND SINDH. | | | BENGAL. | | | MADRAS. | | | BURMA. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Imports. | Exports. | Total. | Imports. | Exports. | Total. | Imports. | Exports. | Total. | Imports. | Exports. | Total. |
| 1861–62 | 9,469 | 18,622 | 28,091 | 10,230 | 12,955 | 23,185 | 2,121 | 3,317 | 5,438 | 500 | 1,422 | 1,922 |
| 1871–72 | 11,300 | 25,765 | 37,065 | 16,254 | 27,647 | 43,901 | 3,146 | 7,006 | 10,152 | 1,392 | 2,791 | 4,183 |
| 1881–82 | 20,313 | 33,585 | 53,898 | 21,403 | 34,072 | 55,476 | 4,115 | 7,637 | 11,752 | 3,382 | 6,575 | 9,957 |
| 1883–84 | 23,168 | 36,333 | 59,501 | 23,525 | 36,114 | 59,639 | 4,661 | 9,155 | 13,816 | 3,925 | 6,573 | 10,498 |
| 1885–86 | 26,270 | 35,708 | 61,978 | 21,212 | 33,124 | 54,336 | 4,715 | 8,266 | 12,981 | 3,460 | 6,782 | 10,242 |
| 1887–88 | 29,122 | 37,034 | 66,156 | 24,090 | 37,144 | 61,234 | 5,620 | 9,733 | 15,353 | 6,172 | 6,632 | 12,804 |
| 1889–90 | 31,194 | 44,462 | 75,656 | 26,108 | 39,700 | 65,808 | 6,345 | 11,517 | 17,862 | 5,551 | 7,781 | 13,332 |
| 1891–92 | 31,092 | 48,078 | 79,170 | 26,248 | 39,968 | 66,216 | 6,510 | 10,045 | 16,555 | 5,581 | 10,083 | 15,664 |

sufficiently illustrates the variations in the position of the Provinces in respect to both branches of traffic. In regard to imports, Bombay was behind Bengal until 1885–86, since when it has kept well ahead The change in position in the matter of exports took place a year or so earlier, if we omit to count the temporary run on the western produce during the early sixties. Of the two minor littoral Provinces, both of which show a rise in business, Burma appears to be gaining on Madras, especially in the matter of exports. As regards the trade of the larger ports, the following table explains itself :—

| PORT. | PERCENTAGE OF EACH PORT ON TOTAL FOR INDIA. | | | | | | | | Increase of Trade per cent. since 1887–88. |
|---|---|---|---|---|---|---|---|---|---|
| | 1883–84. | 1884–85. | 1885–86. | 1886–87. | 1887–88. | 1888–89. | 1889–90. | 1890–91. | 1891–92. | |
| A.—FOREIGN TRADE. | | | | | | | | | | |
| Bombay | 41·56 | 43·61 | 43·79 | 42·78 | 43·37 | 44·03 | 43·95 | 43·82 | 41·58 | 11·23 |
| Calcutta | 38·45 | 36·97 | 35·97 | 36·90 | 35·87 | 35·60 | 34·04 | 34·08 | 35·10 | 8·44 |
| Madras | 5·28 | 5·43 | 5·00 | 5·58 | 5·44 | 5·30 | 5·58 | 5·38 | 5·96 | 1·34 |
| Rangoon | 5·06 | 4·67 | 4·93 | 5·01 | 5·90 | 5·20 | 5·76 | 6·45 | 6·57 | 27·45 |
| Karachi | 3·36 | 3·79 | 4·34 | 3·68 | 3·20 | 4·26 | 4·53 | 4·41 | 4·74 | 118·07 |
| *Total A.* | *93·70* | *94·37* | *94·03* | *93·95* | *93·78* | *94·39* | *93·86* | *94·14* | *93·95* | — |
| B.—SHIPPING. | | | | | | | | | | |
| Bombay | 33·82 | 34·78 | 32·67 | 33·70 | 33·23 | 35·22 | 31·48 | 31·33 | 32·9 | — |
| Calcutta | 26·41 | 24·77 | 23·54 | 24·52 | 24·44 | 25·41 | 24·74 | 23·61 | 23·64 | — |
| Madras | 7·24 | 7·62 | 8·10 | 8·07 | 8·05 | 7·22 | 8·26 | 7·87 | 8·85 | — |
| Rangoon | 8·80 | 9·23 | 9·20 | 9·36 | 10·82 | 10·10 | 10·9 | 12·80 | 11·12 | — |
| Karachi | 5·81 | 6·61 | 8·05 | 6·62 | 5·65 | 6·71 | 7·76 | 8·03 | 7·70 | — |
| *Total B.* | *82·08* | *83·01* | *81·56* | *82·27* | *82·19* | *84·66* | *83·14* | *83·64* | *84·21* | — |

The five ports absorb about 94 per cent. of the foreign trade of the country, with a considerably less proportion of its shipping. The last column indicates that in Madras the trade is not so much centred at the capital as it is in the Bengal and Bombay Presidencies, and from other returns it is clear that Tuticorin, Cocanada, Mangalore, Calicut, and other places, are entering into effective competition. The two ports of Calcutta and Bombay took 80 per

80 per cent of the trade in 1883–84, but in 1891–92 their share had been reduced by the improvement in Rangoon and Karachi to 77.

Proportion of the Trade with each country.

The distribution of the total foreign trade between the principal countries concerned in it is shown in the following table. It must be mentioned, however, that in the first five years treasure is taken into consideration, whilst in the last two, the calculation is confined to private merchandise. This difference tends to lower the proportions to the United Kingdom and the China Ports, and in a few minor instances, and to proportionately raise the ratio of the countries that have no treasure dealings with India. But the variation is comparatively slight, except in the case of the United Kingdom.

PROPORTIONATE DISTRIBUTION, BY COUNTRIES, OF INDIAN FOREIGN SEA-BORNE TRADE.

| COUNTRY. | 1882–83. | 1883–84. | 1884–85. | 1885–86. | 1886–87. | 1887–88. | 1888–89. | 1889–90. | 1890–91. | 1891–92. |
|---|---|---|---|---|---|---|---|---|---|---|
| Hong Kong | 9·37 | 8·37 | 8·10 | 8·74 | 8·86 | 8·55 | 7·95 | 7·51 | 6·85 | 6·55 |
| China Treaty Ports | 2·59 | 2·78 | 2·81 | 3·35 | 2·22 | 2·24 | 2·64 | 2·36 | 3·11 | 3·01 |
| Japan | 0·17 | 0·20 | 0·32 | 0·20 | 0·27 | 0·44 | 0·59 | 0·68 | 0·75 | 0·78 |
| Straits Settlement | 3·61 | 3·10 | 3·42 | 3·54 | 3·65 | 3·82 | 3·78 | 3·92 | 4·78 | 4·35 |
| Ceylon | 1·85 | 1·72 | 2·14 | 1·95 | 1·94 | 1·95 | 1·78 | 1·96 | 2·00 | 2·06 |
| Aden | 0·49 | 0·52 | 0·68 | 0·62 | 0 61 | 0·71 | 0·68 | 0·63 | 0·60 | 0·55 |
| Arabia | 1·05 | 0·89 | 0·94 | 1·10 | 1·24 | 1·11 | 1·05 | 1·12 | 0·75 | 0·75 |
| Persia | 1·40 | 1·45 | 1·43 | 1·38 | 1·35 | 1·31 | 1·36 | 1·46 | 1·45 | 1·56 |
| Turkey in Asia | 0·72 | 0·58 | 0·63 | 0·50 | 0·52 | 0·56 | 0·59 | 0·62 | 0·55 | 0·77 |
| Egypt | 1·63 | 2·58 | 2·09 | 2·34 | 1·89 | 2·10 | 2·07 | 2·20 | 2·74 | 4·19 |
| Mauritius | 1·00 | 1·08 | 1·80 | 1·35 | 1·64 | 1·60 | 1·41 | 1·57 | 1·79 | 1·71 |
| Zanzibar | 0·51 | 0·51 | 0·45 | 0·52 | 0·65 | 1·09 | 0·86 | 0·83 | 0·80 | 0·71 |
| United Kingdom | 55·31 | 56·09 | 55·30 | 55·61 | 54·88 | 54·81 | 54·89 | 53·94 | 50·16 | 47·42 |
| France | 5·25 | 5·97 | 5·84 | 4·87 | 5·38 | 4·85 | 5·37 | 4·88 | 5·14 | 6·88 |
| Germany | 0·41 | 0·48 | 0·43 | 0·35 | 0·59 | 0·73 | 0·98 | 1·77 | 3·60 | 3·79 |
| Italy | 3·66 | 2·79 | 2·65 | 2·99 | 3·87 | 3·19 | 2·34 | 2·53 | 2·44 | 2·03 |
| Holland | 0·32 | 0·22 | 0·31 | 0·35 | 0·31 | — | — | — | 0·25 | 0·62 |
| Belgium | 1·51 | 2·31 | 2·21 | 2·63 | 2·44 | 2·07 | 2·90 | 3·44 | 3·33 | 3·89 |
| Austria | 2·18 | 1·88 | 2·06 | 1·75 | 2·16 | 2·13 | 2·21 | 2·00 | 2·12 | 1·73 |
| Malta | 0·52 | 0·67 | 0·30 | 0·35 | 0·25 | — | — | — | — | — |
| Russia | 0·09 | 0·10 | 0·08 | 0·07 | 0·24 | — | — | — | 0·51 | 0·65 |
| United States | 2·89 | 2·35 | 3·07 | 2·95 | 3·21 | 3·41 | 3·11 | 3·00 | 3·25 | 2·91 |
| South America | 0·20 | 0·28 | 0·20 | 0·29 | 0·22 | — | — | — | 0·43 | 0·57 |
| Australia | 2·02 | 1·99 | 1·66 | 1·03 | 0·72 | 1·28 | 1·07 | 1·17 | 0·87 | 0·72 |

The first point to notice is the remarkable widening of the sphere of Indian trade within the last twenty years or so. This is partly, no doubt, artificial, as the Suez Canal afforded the means of trading direct with countries that had previously been in the habit of dealing through England. That country, at the time the canal was opened, took about 63 per cent. of the traffic, of which it now takes about half. But, as the reviewer pertinently remarks, India's trade with the United Kingdom alone is now as large as her trade with the whole world was 20 years ago. We may place the countries whose trade with India amounts to not less than one per cent. on the total in the following order: The United Kingdom, Hong Kong, France, the Straits Settlements, Germany (for the last two years), Belgium, the United States, the China Treaty Ports; Egypt, on the understanding that the trade is really destined ultimately for Europe; Italy, Austria, Ceylon, Mauritius, and Persia.

But when we come to subdivide the trade into imports and exports it will be found that the order materially differs from that above mentioned. This is a point which can be best treated in a tabular form. The following

TRADE AND COMMERCE.

following statement shows the distribution of the two branches in a proportional form :—

PRIVATE MERCHANDISE, INCLUDING TREASURE.

| COUNTRY. | Proportion of Trade of each Country to Rs. 10,000 Annually Imported or Exported respectively. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Imported into India. | | | | | | Exported from India. | | | | | |
| | 1881–82. | 1883–84. | 1885–86. | 1887–88. | 1889–90. | 1891–92. | 1881–82. | 1883–84. | 1885–86. | 1887–88. | 1889–90. | 1891–92. |
| Ceylon | 86 | 108 | 98 | 102 | 95 | 101 | 197 | 174 | 229 | 230 | 224 | 271 |
| Straits Settlements | 328 | 306 | 311 | 340 | 367 | 354 | 430 | 348 | 439 | 462 | 465 | 485 |
| Aden | 15 | 13 | 17 | 18 | 20 | 19 | 59 | 68 | 75 | 100 | 85 | 76 |
| Persia | 105 | 107 | 125 | 102 | 121 | 107 | 143 | 156 | 154 | 152 | 167 | 186 |
| Arabia | 70 | 53 | 57 | 57 | 56 | 53 | 112 | 82 | 107 | 114 | 101 | 88 |
| Turkey in Asia | 54 | 42 | 53 | 44 | 66 | 86 | 42 | 44 | 49 | 57 | 53 | 72 |
| Hong Kong | 287 | 337 | 300 | 336 | 302 | 337 | 1,154 | 1,109 | 1,138 | 1,142 | 1,046 | 852 |
| China Treaty Ports | 41 | 68 | 58 | 51 | 66 | 95 | 509 | 387 | 372 | 305 | 301 | 427 |
| Japan | 1 | 3 | 4 | 5 | 4 | 10 | 17 | 33 | 33 | 79 | 118 | 120 |
| Mauritius | 205 | 146 | 213 | 248 | 261 | 258 | 88 | 91 | 108 | 122 | 109 | 117 |
| East Africa | 65 | 56 | 78 | 107 | 63 | 60 | 57 | 68 | 57 | 77 | 90 | 84 |
| Egypt | 10 | 13 | 10 | 12 | 11 | 14 | 209 | 408 | 388 | 358 | 277 | 668 |
| United Kingdom | 8,210 | 8,145 | 8,040 | 7,861 | 7,558 | 7,249 | 4,263 | 4,204 | 4,091 | 3,872 | 3,784 | 3,197 |
| France | 144 | 126 | 120 | 136 | 147 | 156 | 978 | 947 | 799 | 797 | 749 | 1,015 |
| Germany | 17 | 23 | 23 | 31 | 85 | 229 | 93 | 70 | 49 | 114 | 269 | 471 |
| Belgium | – | 33 | 51 | 49 | 131 | 154 | 241 | 386 | 445 | 351 | 546 | 506 |
| Austria | 63 | 75 | 87 | 124 | 106 | 126 | 297 | 256 | 240 | 302 | 287 | 202 |
| Italy | 112 | 98 | 80 | 59 | 77 | 80 | 379 | 400 | 436 | 500 | 112 | 273 |
| United States | 99 | 100 | 161 | 165 | 260 | 180 | 329 | 352 | 363 | 418 | 364 | 359 |
| Australia | 48 | 106 | 81 | 78 | 59 | 43 | 98 | 68 | 70 | 124 | 104 | 90 |
| *Elsewhere* | *40* | *42* | *33* | *75* | *177* | *239* | *305* | *349* | *358* | *324* | *349* | *436* |

It appears that though the pre-eminence of the United Kingdom is undoubted in both, the proportion in which it contributes to the import trade is more than double that in which it shares the exports. In the opposite direction, there is Hong Kong and most of the other countries named, where the imports pale before those from the mother-country, whilst the exports assert themselves more and more, as time goes on. It is not to be presumed, of course, from this table that the volume of the trade in either direction is necessarily in accordance with the proportions here given. For example, the ratio of the trade with the United Kingdom has been continuously decreasing, but the following table will show that the imports have expanded by 25 per cent. in the decade, whilst the exports, though equal during the year last cited, have been generally somewhat above the initial figure.

RELATION DURING THE DECADE OF THE TRADE WITH EACH COUNTRY TO THE VALUES OF 1881-82 (=100).

| COUNTRY. | Imports of Merchandise to India. | | | | | | Exports of Merchandise from India. | | | | | | Proportion of Exports each Year to Imports, including Treasure = 100. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1881-82. | 1883-84. | 1885-86. | 1887-88. | 1889-90. | 1891-92. | 1881-82. | 1883-84. | 1885-86. | 1887-88. | 1889-90. | 1891-92. | 1881-82. | 1887-88. | 1891-92. |
| Ceylon | 100 | 142 | 127 | 158 | 157 | 167 | 100 | 95 | 119 | 129 | 143 | 181 | 643 | 1,075 | — |
| Straits Settlements | 100 | 105 | 104 | 137 | 158 | 153 | 100 | 87 | 104 | 118 | 136 | 149 | 218 | 191 | 219 |
| Aden | 100 | 98 | 121 | 157 | 180 | 175 | 100 | 124 | 129 | 186 | 182 | 170 | 278 | 601 | 589 |
| Arabia | 100 | 85 | 90 | 109 | 114 | 108 | 100 | 79 | 98 | 112 | 114 | 103 | 120 | 148 | 149 |
| Persia | 100 | 114 | 131 | 129 | 163 | 144 | 100 | 117 | 110 | 117 | 147 | 172 | 260 | 228 | 284 |
| Turkey in Asia | 100 | 88 | 88 | 110 | 175 | 226 | 100 | 112 | 118 | 148 | 160 | 226 | 76 | 127 | 149 |
| Hong Kong | 100 | 132 | 115 | 155 | 149 | 166 | 100 | 103 | 101 | 109 | 114 | 97 | 252 | 260 | 187 |
| China Treaty Ports | 100 | 186 | 156 | 166 | 231 | 333 | 100 | 82 | 75 | 66 | 75 | 111 | 624 | 273 | 281 |
| Japan | 100 | 463 | 724 | 927 | 882 | 2,061 | 100 | 212 | 203 | 528 | 898 | 952 | 2,367 | 2,397 | 1,962 |
| Mauritius | 100 | 80 | 115 | 161 | 180 | 178 | 100 | 111 | 126 | 153 | 156 | 175 | 105 | 70 | 72 |
| East Africa | 100 | 96 | 132 | 220 | 137 | 132 | 100 | 128 | 103 | 150 | 201 | 196 | 132 | 209 | 213 |
| Egypt | 100 | 144 | 106 | 150 | 157 | 189 | 100 | 210 | 189 | 189 | 227 | 421 | 503 | 1,096 | 2,715 |
| United Kingdom | 100 | 111 | 108 | 127 | 130 | 125 | 100 | 106 | 98 | 100 | 112 | 99 | 80 | 62 | 63 |
| France | 100 | 98 | 92 | 125 | 144 | 154 | 100 | 104 | 83 | 89 | 96 | 137 | 1,058 | 796 | 949 |
| Germany | 100 | 156 | 153 | 248 | 721 | 1,949 | 100 | 81 | 54 | 136 | 366 | 671 | 972 | 532 | 334 |
| Belgium | * | * | * | * | * | * | 100 | 173 | 188 | 160 | 286 | 277 | -- | 1,036 | 412 |
| Austria | 100 | 134 | 153 | 260 | 238 | 284 | 100 | 92 | 82 | 112 | 121 | 89 | 682 | 321 | 232 |
| Italy | 100 | 99 | 79 | 71 | 97 | 102 | 100 | 113 | 118 | 146 | 130 | 97 | 339 | 540 | 559 |
| United States | 100 | 113 | 179 | 221 | 371 | 257 | 100 | 115 | 113 | 140 | 140 | 144 | 579 | 194 | 219 |
| Australia | 100 | 246 | 187 | 214 | 173 | 127 | 100 | 74 | 73 | 140 | 133 | 121 | 51 | 109 | 70 |
| TOTAL INDIA | 100 | 112 | 110 | 133 | 142 | 142 | 100 | 107 | 102 | 110 | 126 | 132 | 138† | 117† | 134† |

* In 1881-82 the Imports from Belgium were only Rx. 2,250, and in 1891-92 Rx. 1,324,027, and the comparative figures are not given.
† Including Government Stores and Treasure.

The table shows how very few of the countries represented, except the United Kingdom, have not exceeded in the rate of the progress of their trade with India the general average given at the foot of the table. The only really bad years for trade here quoted are 1885-86, and the preceding year, which is not included in the statement. The two chief trading countries, England and China, seem to have varied as to exports much in the same way, but in imports the Far East has the advantage in the comparison.

In the last section of the table the exports of merchandise are set off against the imports together with the net imports of treasure. The balance of trade, it appears, is generally in favour of India, except in the important case of the United Kingdom and of Australia. The difference has been generally discussed in the chapter on finance, where it was shown that the debt owing to the mother-country is on account of either the protection of India against its two chief enemies in the past, foreign invasion and famine, or the development of its resources by means of capital which was not available to the State from within the country itself, and by means of an agency which has to be similarly supplied from the country on which India is dependent for the maintenance of its present condition.

There is, finally, the nature of the trade with each country that ought to be noticed. This is necessarily a long business, and, so far as the main commodities are concerned, can be fairly well appreciated from a tabular statement, such as is given on the next page.

## Trade with Foreign Countries

### Percentage of Principal Articles of Trade on Total Imports and Exports respectively.

| Country and Article. | 1881–82. | 1883–84. | 1885–86. | 1889–90. | 1891–92. |
|---|---|---|---|---|---|
| **1. United Kingdom.** | | | | | |
| (*a*) *Imports from*— | | | | | |
| 1. Grey Cotton Piece-goods | 33·2 | 27·8 | 28·5 | 29·8 | 28·7 |
| 2. White ditto ditto | 9·1 | 10·3 | 8·3 | 9·2 | 10·1 |
| 3. Coloured ditto ditto | 10·1 | 10·7 | 12·1 | 11·6 | 11·2 |
| 4. Twist and Yarn | 8·2 | 7·9 | 7·5 | 6·8 | 7·1 |
| 5. Woollen Piece-goods | 2·3 | 2·1 | 2·5 | 1·6 | 2·0 |
| 6. Liquors, Wines, &c. | 2·9 | 2·8 | 2·8 | 2·4 | 2·4 |
| 7. Hardware, &c. | 1·6 | 1·8 | 1·7 | 1·9 | 2·1 |
| 8. Machinery | 1·6 | 1·9 | 1·3 | 3·0 | 2·2 |
| 9. Silk Piece-goods | 1·2 | 0·9 | – | 1·4 | 1·4 |
| 10. Sheet Copper | 1·1 | 1·7 | 1·8 | 1·4 | 1·4 |
| 11. Copper, mixed, &c. | 1·3 | 1·7 | 1·8 | 1·4 | 1·4 |
| (*b*) *Exports to*— | | | | | |
| I. Raw Cotton | 20·7 | 17·4 | 10·5 | 16·4 | 4·7 |
| II. Wheat | 11·4 | 11·7 | 13·0 | 8·2 | 17·2 |
| III. Oilseeds | 7·0 | 10·3 | 12·4 | 9·3 | 10·9 |
| IV. Rice (*husked*) | 8·6 | 6·8 | 8·2 | 4·4 | 5·6 |
| V. Tea | 10·1 | 10·9 | 12·2 | 12·9 | 16·0 |
| VI. Raw Jute | 11·5 | 10·4 | 9·6 | 16·1 | 13·0 |
| VII. Indigo | 6·9 | 6·7 | 5·2 | 4·1 | 2·9 |
| VIII. Skins (*dressed*) | 4·6 | 4·9 | 5·8 | 5·1 | 6·2 |
| IX. Hides | 3·4 | 3·8 | 4·6 | 2·4 | 1·4 |
| X. Raw Wool (Indian) | 2·3 | 2·0 | 2·5 | 2·7 | 2·8 |
| XI. Raw Wool (Foreign) | 0·6 | 0·6 | 1·0 | 1·8 | 1·8 |
| **2. France.** | | | | | |
| (*a*) *Imports from*— | | | | | |
| 1. Apparel | 12·1 | 13·8 | 17·6 | 19·7 | 19·2 |
| 2. Silk Piece-goods | 35·8 | 18·4 | 19·6 | 8·6 | 14·5 |
| 3. Silk and other Fabrics, mixed | 2·2 | 11·0 | 14·0 | 25·0 | 20·1 |
| 4. Brandy | 8·6 | 7·3 | 7·9 | 8·0 | 7·5 |
| 5. Wines | 3·4 | 3·6 | 4·0 | 2·5 | 2·9 |
| 6. Clocks and Watches | 4·2 | 6·3 | 7·2 | 4·0 | 5·8 |
| 7. Saffron Dye | 5·2 | 8·2 | 6·9 | 7·3 | 5·4 |
| 8. Glass Beads, &c. | 3·3 | 1·2 | – | 4·2 | 4·2 |
| 9. Cotton Piece-goods, coloured | 3·0 | 3·2 | 1·8 | 2·4 | 2·6 |
| (*b*) *Exports to*— | | | | | |
| I. Raw Cotton | 20·4 | 19·6 | 18·7 | 25·3 | 11·8 |
| II. Wheat | 29·8 | 18·0 | 12·2 | 7·0 | 26·6 |
| III. Oilseeds | 30·2 | 39·4 | 45·0 | 40·9 | 40·9 |
| IV. Coffee | 4·3 | 3·6 | 5·0 | 6·4 | 5·9 |
| V. Raw Silk | 1·9 | 3·2 | 2·5 | 4·2 | 2·4 |
| VI. Pepper | — | 1·3 | 1·9 | 1·9 | 1·2 |
| VII. Hides | 1·1 | — | 1·9 | 1·4 | 1·4 |
| VIII. Indigo | — | — | — | 4·5 | 3·7 |

TRADE WITH FOREIGN COUNTRIES—*continued.*

| COUNTRY AND ARTICLE. | 1881–82. | 1883–84. | 1885–86. | 1889–90. | 1891–92. |
|---|---|---|---|---|---|
| **3. GERMANY.** | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Woollen Piece-goods | 15·7 | 31·9 | 41·2 | 16·1 | 15·8 |
| 2. Salt | 18·2 | 16·3 | 14·3 | 19·9 | 11·8 |
| 3. Refined Sugar | — | — | — | 9·1 | 19·1 |
| 4. Hardware | — | 2·7 | 1·6 | 5·2 | 5·0 |
| 5. Matches | 4·5 | 7·4 | 7·3 | 4·4 | 4·4 |
| 6. Glass | — | 1·1 | 1·6 | 3·3 | 2·7 |
| 7. Wine, Beer, &c. | 2·8 | 7·1 | 6·6 | 3·8 | 1·9 |
| 8. Apparel | — | — | — | 3·4 | 2·6 |
| 9. Aniline Dye | — | 1·8 | — | 3·7 | 3·3 |
| 10. Steel | — | — | — | 1·8 | 3·9 |
| (*b.*) *Exports to*— | | | | | |
| I. Raw Cotton | 83·3 | 51·8 | 10·6 | 50·3 | 35·4 |
| II. Raw Jute | 3·0 | — | 14·7 | 21·5 | 14·7 |
| III. Oilseeds | — | 37·0 | 28·1 | 6·8 | 12·8 |
| IV. Hides and Skins | — | — | 4·9 | 4·4 | 13·6 |
| V. Indigo | — | 3·8 | 28·0 | 9·0 | 6·2 |
| VI. Rice (*husked*) | 9·3 | 1·4 | 7·7 | 2·7 | 4·5 |
| VII. Wheat | 2·5 | 1·8 | — | — | 6·5 |
| **4. BELGIUM.** | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Bar Iron | — | 10·5 | 9·4 | 10·8 | 8·5 |
| 2. Iron Goods | — | 12·0 | 15·4 | 26·1 | 19·3 |
| 3. Steel | — | 3·9 | 4·7 | 4·3 | 11·4 |
| 4. Stationery | 27·3 | 5·6 | 3·8 | 1·6 | — |
| 5. Candles | — | 9·9 | 5·4 | 3·1 | 2·8 |
| 6. Glass, Sheet and Plate | 4·5 | 7·0 | 6·1 | 2·9 | 2·9 |
| 7. Hardware | — | 5·3 | 7·8 | 2·9 | 3·7 |
| 8. Glass Ware | — | 7·3 | 10·7 | 5·7 | 6·3 |
| 9. Aniline Dye | — | — | — | 15·9 | 20·5 |
| 10. Cotton Twist and Yarn | 13·6 | — | — | 1·5 | 1·1 |
| (*b.*) *Exports to*— | | | | | |
| I. Raw Cotton | 19·5 | 32·6 | 43·5 | 48·9 | 29 8 |
| II. Wheat | 59·7 | 32·4 | 28·7 | 16·8 | 38·9 |
| III. Oilseeds | 20·4 | 30·5 | 26·0 | 31·3 | 26·2 |
| **5. AUSTRIA.** | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Cotton Twist and Yarn | 16·8 | 13·4 | 9·4 | 4·5 | 5·7 |
| 2. Apparel | — | 9·5 | 11·1 | 10·9 | 14·1 |
| 3. Woollen Piece-goods | — | 2·3 | 4·6 | 14·4 | 7·0 |
| 4. Hardware | — | 3·6 | 3·4 | 4·1 | 5·4 |
| 5. Paper—*Printing* | — | 3·7 | 3·4 | 5·6 | 3·8 |
| 6. Paper—*Writing* | 10·4 | 7·1 | 10·4 | 6·0 | 4·5 |
| 7. Paper—*Others* | — | 2·7 | 3·2 | 4·5 | 3·8 |
| 8. Stationery—*General* | — | — | 1·3 | 2·2 | 2·4 |
| 9. Glass Beads | — | 6·2 | 4·9 | 5·0 | 4·4 |
| 10. Glass Ware | — | 2·7 | 4·2 | 4·6 | 4·8 |
| 11. Silk Mixed Goods | — | 1·5 | 2·0 | 2·4 | 1·9 |
| 12. Aniline | — | — | 2·2 | 2·5 | 3·2 |
| (*b.*) *Exports to*— | | | | | |
| I. Raw Cotton | 71·5 | 65·1 | 65·8 | 75·9 | 63·1 |
| II. Indigo | 15·7 | 17·6 | 18·5 | 12·7 | 13 9 |
| III. Raw Jute | 3·2 | 4·0 | 3·5 | 3·4 | 7·1 |
| IV. Raw Hides | 4·6 | 5·8 | 5·3 | 1·8 | 3·3 |

TRADE WITH FOREIGN COUNTRIES—*continued*.

| COUNTRY AND ARTICLE. | 1881–82. | 1883–84. | 1885–86. | 1889–90. | 1891–92. |
|---|---|---|---|---|---|
| 6. ITALY. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Coral | 34·0 | 42·1 | 29·6 | 25·2 | 27·7 |
| 2. White Cotton Piece-goods | 4·8 | 4·5 | 5·4 | 8·1 | 2·4 |
| 3. Coloured Piece-goods | 2·8 | 3·9 | 8·5 | 12·1 | 13·4 |
| 4. Glass Beads, &c. | 10·0 | 13·9 | 13·6 | 10·1 | 13·0 |
| 5. Silk Piece-goods | 15·0 | 1·0 | 3·4 | 5·2 | 9·0 |
| 6. Apparel | 2·1 | 3·2 | 2·6 | 5·0 | 2·9 |
| 7. Marble, &c. | 2·2 | 1·7 | 3·5 | 1·5 | 2·0 |
| 8. Clocks and Watches | — | 1·0 | — | 3·0 | 3·4 |
| (*b.*) *Exports to*— | | | | | |
| I. Raw Cotton | 64·8 | 60·4 | 56·5 | 64·5 | 47·2 |
| II. Wheat | 5·4 | 5·1 | 12·2 | 4·2 | 17·1 |
| III. Oilseeds | 10·1 | 12·2 | 13·3 | 14·0 | 19·2 |
| IV. Raw Silk | 5·9 | 6·3 | 2·4 | 2·4 | 0·7 |
| V. Raw Jute | 2·0 | 1·8 | 2·7 | 4·6 | 5·4 |
| VI. Indigo | 1·9 | 1·5 | 1·0 | 1·1 | 1·5 |
| VII. Raw Hides | 7·4 | 7·7 | 10·1 | 6·8 | 6·7 |
| 7. UNITED STATES. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Grey Cotton Goods | — | 2·4 | — | 2·5 | 4·6 |
| 2. Kerosine Oil | 89·1 | 94·0 | 83·3 | 95·0 | 89·3 |
| (*b.*) *Exports to*— | | | | | |
| I. Raw Jute | 25·1 | 18·1 | 23·6 | 28·6 | 22·1 |
| II. Linseed | 6·2 | 18·1 | 6·4 | 13·5 | 2·0 |
| III. Indigo | 23·8 | 20·9 | 20·9 | 14·7 | 12·6 |
| IV. Raw Skins | 5·9 | 7·8 | 7·0 | 6·8 | 14·5 |
| V. Dressed Skins | 8·6 | 6·2 | 7·2 | 9·5 | 14·2 |
| VI. Shell-lac | 6·8 | 3·3 | 3·5 | 4·2 | 6·3 |
| VII. Saltpetre | 3·8 | 2·7 | 2·8 | 2·3 | 2·8 |
| VIII. Raw Hides | 6·8 | 8·3 | 14·2 | 4·0 | 4·2 |
| IX. Gunny Bags | 3·4 | 6·1 | 4·5 | 2·5 | 6·0 |
| X. Gunny Cloth | — | 0·9 | 2·6 | 5·5 | 6·8 |
| XI. Cutch | 2·6 | 2·9 | 2·4 | 2·4 | 2·4 |
| 8. AUSTRALIA. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Horses | 53·9 | 22·8 | 36·8 | 31·1 | 53·5 |
| 2. Copper | 30·4 | 61·1 | 37·7 | 38·0 | 30·4 |
| 3. Coal | — | 8·8 | 14·5 | 22·5 | 6·2 |
| (*b.*) *Exports to*— | | | | | |
| I. Gunny Bags | 76·1 | 68·3 | 53·3 | 62·9 | 56·6 |
| II. Castor Oil | 6·3 | 13·6 | 8·1 | 11·8 | 11·5 |
| III. Tea | 8·4 | 4·1 | 12·9 | 12·7 | 19·4 |
| IV. Rice (*husked*) | 4·1 | 4·4 | 5·6 | 2·5 | 2·6 |
| 9. ADEN. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Ivory | 26·9 | 33·1 | 22·0 | 15·1 | 13·6 |
| 2. Salt | — | — | — | 35·4 | 36·0 |
| 3. Coffee | — | 2·1 | 1·1 | 2·5 | 5·8 |

TRADE WITH FOREIGN COUNTRIES—*continued.*

| COUNTRY AND ARTICLE. | 1881-82. | 1883-84. | 1885-86. | 1889-90. | 1891-29. |
|---|---|---|---|---|---|
| 9. ADEN—*continued.* | | | | | |
| (*b.*) *Exports to*— | | | | | |
| I. European Cotton Piece-goods | 8·5 | 9·0 | 8·0 | 7·8 | 7·9 |
| II. Indian Cotton Piece-goods | 24·5 | 39·5 | 28·3 | 21·2 | 20·6 |
| III. Indian Twist and Yarn | 11·5 | 8·8 | 7·6 | 8·1 | 9·9 |
| IV. Rice (*husked*) | 10·0 | 9·1 | 13·9 | 13·8 | 12·5 |
| V. Millets | 12·3 | 1·3 | 4·8 | 16·1 | 4·2 |
| VI. Wheat Flour | 2·0 | 3·3 | 6·2 | 7·8 | 9·5 |
| VII. Tobacco | 9·3 | 5·6 | 9·5 | 5·4 | 8·7 |
| VIII. Ginger | 1·0 | 2·2 | 2·0 | — | 2·7 |
| IX. Wheat | 3·3 | 1·3 | 1·3 | 1.1 | 1·4 |
| X. Foreign Refined Sugar | — | — | — | 2·1 | 3·6 |
| 10. ARABIA. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Dates | 39·6 | 37·2 | 44·1 | 39·6 | 45·8 |
| 2. Pearls, &c. | 11·4 | 17·1 | 19·3 | 17·6 | 18·3 |
| 3. Salt | 7·3 | 7·6 | 7·5 | 13·4 | 3·6 |
| 4. Shark Fins, &c. | 3·6 | 4·3 | 4·4 | 4·7 | 4·3 |
| 5. Frankincense | — | — | — | 6·0 | 5·7 |
| (*b.*) *Exports to*— | | | | | |
| I. Foreign Cotton Piece-goods | 14·4 | 16·9 | 12·0 | 10·5 | 10·8 |
| II. Indian Cotton Piece-goods | 9·5 | 6·9 | 6·4 | 3·0 | 6·0 |
| III. Foreign Cotton Twist and Yarn | 1·8 | 1·1 | 0·8 | 1·0 | 1·2 |
| IV. Indian Cotton Twist and Yarn | 2·0 | 2·0 | 1·0 | 1·3 | 2·0 |
| V. Foreign Sugar (*refined*) | 1·9 | 4·9 | 2·7 | 3·5 | 3·1 |
| VI. Foreign Coffee | 1·1 | 1·4 | 0·9 | — | 1·3 |
| VII. Indian Coffee | 5·1 | 2·6 | 5·2 | 5·2 | 4·7 |
| VIII. Rice (*husked*) | 32·4 | 36·8 | 37·7 | 41·8 | 33·4 |
| IX. Millets | 4·5 | 1·0 | 3·2 | 6·3 | 2·2 |
| X. Wheat | 5·0 | — | 6·5 | 3·2 | 1·2 |
| XI. Wheat Flour | — | — | — | 6·0 | 5·1 |
| XII. Indian Sugar (*unrefined*) | 1·3 | 1·5 | — | 1·0 | 1·5 |
| 11. MAURITIUS. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Sugar (*refined*) | 99·1 | 99·3 | 99·2 | 97·5 | 95·4 |
| 2. Sugar (*unrefined*) | — | — | — | — | 2·6 |
| (*b.*) *Exports to*— | | | | | |
| I. Rice (*husked*) | 59·3 | 53·1 | 63·8 | 50·0 | 56·8 |
| II. Pulse (*gram*) | 8·5 | 8·8 | 6·7 | 6·6 | 5·9 |
| III. Pulse (*others*) | 4·4 | 5·2 | 3·8 | 3·3 | 2·8 |
| IV. Oils and Oil Cake | 2·7 | 2·7 | 2·6 | 2·4 | 2·2 |
| V. Saltpetre | 1·4 | 1·4 | — | 1·7 | 2·3 |
| VI. Provisions (*miscellaneous*) | 6·0 | 5·0 | 3·4 | 1·2 | 1·0 |
| VII. Gunny Bags | — | 1·1 | 2·4 | 3·6 | 2·2 |
| VIII. Wheat Flour | — | — | — | 4·5 | 5·7 |
| 12. ZANZIBAR. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Ivory | 33·0 | 35·7 | 47·8 | 18·2 | 49·3 |
| 2. Cloves | 50·9 | 43·6 | 34·8 | 53·4 | 35·3 |
| 3. Dried Cocoa-nut | 0·4 | 2·6 | 4·5 | 16·8 | 3·5 |
| (*b.*) *Exports to*— | | | | | |
| I. Foreign Cotton Goods | 31·84 | 26·76 | 30·03 | 28·60 | 25·91 |
| II. Indian Cotton Goods | 20·1 | 29·4 | 20·4 | 20·9 | 30·2 |
| III. Rice (*husked*) | 17·8 | 15·2 | 25·3 | 26·1 | 18.5 |
| IV. Foreign Sugar (*refined*) | 2·0 | 1·6 | 1·1 | 1·5 | 1·3 |
| V. Wheat Flour | — | — | 1·2 | 1·6 | 2·6 |
| VI. Clarified Butter | — | — | 1·1 | 1·2 | 1·9 |

TRADE WITH FOREIGN COUNTRIES—*continued.*

| COUNTRY AND ARTCILE. | 1881-82. | 1883-84. | 1885-86. | 1889-90. | 1891-92. |
|---|---|---|---|---|---|
| 13. EGYPT. | | | | | |
| (*a.*) *Imports foom—* | | | | | |
| 1. Apparel | 8·7 | 28·7 | 47·9 | 23·2 | 26·4 |
| 2. Tobacco (*manufactured*) | 3·1 | 5·6 | 13·9 | 22·3 | 18·3 |
| 3. Raw Cotton | 14·7 | — | — | — | 27·8 |
| (*b.*) *Exports to—* | | | | | |
| I. Rice (*husked*) | 47·2 | 30·7 | 43·2 | 57·7 | 52·5 |
| II. Wheat | 22·5 | 40·5 | 29·1 | 17·7 | 30·8 |
| III. Oilseeds | 3·2 | 10·1 | 6·8 | 8·4 | 4·3 |
| IV. Indigo | 14·9 | 8·11 | 8·0 | 6·7 | 4·4 |
| V. Sugar | 0·9 | 1·9 | 2·0 | — | — |
| 14. TURKEY IN ASIA. | | | | | |
| (*a. Imports from—* | | | | | |
| 1. Horses | 6·9 | 11·3 | 11·6 | 20·1 | 17·1 |
| 2. Wheat | 18·9 | 24·7 | 5·5 | 8·3 | 19·8 |
| 3. Dates | 51·3 | 46·4 | 54·2 | 37·7 | 34·3 |
| 4. Clarified Buttèr | 2·5 | 1·6 | 11·2 | 13·0 | 13·7 |
| 5. Grain (*miscellaneous*) | 6·9 | 1·2 | 3·6 | 5·2 | 2·2 |
| (*b.*) *Exports to—* | | | | | |
| I. Foreign Cotton Goods | 23·8 | 26·4 | 29·3 | 27·9 | 23·3 |
| II. Indian Cotton Goods | 1·4 | 1·7 | 5·4 | 4·9 | 5·2 |
| III. Foreign Sugar (*refined*) | 7·0 | 8·9 | 6·2 | 6·3 | 3·6 |
| IV. Coffee | 10 6 | 4·7 | 6 6 | 4·4 | 7·3 |
| V. Indigo | 33·5 | 25·9 | 17·1 | 17·9 | 16·9 |
| VI. Pepper | 2·6 | 1·5 | 3·4 | 3·7 | 2·7 |
| VII. Gunny Bags | 2·1 | 9·0 | 7·1 | 10·3 | 11·6 |
| VIII. Indian Cotton Twist, &c. | — | — | 1·4 | 4·3 | 4·4 |
| IX. Indian Tea | — | — | — | 1·1 | 3·5 |
| 15. PERSIA. | | | | | |
| (*a.*) *Imports from—* | | | | | |
| 1. Raw Cotton | 17·0 | 16·6 | 25 0 | 30·4 | 14·9 |
| 2. Pearls, &c. | 10·9 | 11·7 | 11·3 | 7·1 | 7·8 |
| 3. Dates | 10·5 | 6·0 | 5·4 | 7·0 | 8·5 |
| 4. Fruits | 12·7 | 14·3 | 13·7 | 15·7 | 18·1 |
| 5. Raw Wool | 8·4 | 7·9 | 8·4 | 12·9 | 11·1 |
| 6. Woollen Manufactures | 1·8 | 1·9 | — | — | 2·2 |
| 7. Perfumery | 2·0 | 2·6 | 1·9 | 2·3 | 2·1 |
| 8. Assafœtida | 5·6 | 4·2 | 4·2 | 5·0 | 4·0 |
| 9. Raw Silk | 5·1 | 4·8 | 1·2 | 1·1 | 2 3 |
| (*b.*) *Exports to—* | | | | | |
| I. Foreign Cotton Goods | 56·1 | 50·3 | 47·8 | 41·8 | 36·7 |
| II. Indian Cotton Goods | 2·1 | 1·4 | 2·2 | 1·6 | 2·0 |
| III. Foreign Cotton Twist, &c. | 2·2 | 4·0 | 2·6 | 3·6 | 3·3 |
| IV. Indigo | 9 0 | 5·8 | 4·5 | 10.0 | 4·8 |
| V. Indian Tea | — | — | — | 4·7 | 9·6 |
| VI. Foreign Tea | 3·0 | 2·9 | 5 9 | 8·9 | 19·6 |
| VII. Foreign Sugar (*refined*) | 5·8 | 10·9 | 10·7 | 6·6 | 4 3 |
| VIII. Foreign Copper | 1·3 | 3·9 | 2 9 | 3·0 | 2·7 |
| IX. Indian Coffee | 1·5 | 1·2 | 2·5 | 2·2 | 2·4 |
| X. Rice (*husked*) | 4:6 | 5·6 | 7·4 | 4·5 | 4·9 |
| XI. Pepper | — | — | 1·0 | 1·7 | 1·0 |

TRADE WITH FOREIGN COUNTRIES—*continued.*

| COUNTRY AND ARTICLE. | 1881-82. | 1883-84. | 1885-86. | 1889-90. | 1891-92. |
|---|---|---|---|---|---|
| 16. CEYLON. | | | | | |
| (*a*) *Imports from—* | | | | | |
| 1. Betel Nuts | 24·4 | 25·3 | 39·3 | 25·0 | 23·9 |
| 2. Coffee | 9·9 | 1·3 | 5·2 | 4·3 | 1·9 |
| 3. Tea | — | — | — | 3·1 | 6.1 |
| 4. Shells (conch, &c.) | 1·8 | 2·0 | 2·6 | 1·6 | 2·2 |
| 5. Dried Cocoa-nut | 2·2 | 18·7 | 14·0 | 3·5 | 2·7 |
| 6. Gunny Bags | 6·2 | 5·2 | 4·4 | 5·9 | 5·0 |
| 7. Cardamoms | — | — | 1·6 | 4·8 | 4·9 |
| 8. Wood (not Teak) | 3·5 | 2·2 | 2·5 | 1·7 | 1·5 |
| 9. Cocoa-nut Oil | — | — | — | 14 4 | 25·1 |
| 10. Coir (*manufactured*) | 1·3 | 1·5 | 2·3 | 1·1 | 2·3 |
| (*b.*) *Exports to—* | | | | | |
| I. Foreign Cotton Goods | — | 1·5 | 1·0 | 2 0 | 2.3 |
| II. Indian Cotton Goods | 5·7 | 10·4 | 6·3 | 7·0 | 6·2 |
| III. Rice (*husked*) | 60·2 | 53·0 | 62·7 | 59·7 | 62·6 |
| IV. Rice in husk | 3·5 | 2·1 | 4·0 | 2·7 | 3·0 |
| V. Oilcake | 2·7 | 1·7 | 1·5 | 1·6 | 2·0 |
| VI. Salt Fish | 1·4 | 1·3 | 1·9 | 2·1 | 2·4 |
| VII. Wheat Flour | 1·2 | 1·2 | 1·0 | 1·6 | 1·5 |
| VIII. Sugar (*refined*) | 1·6 | 1·7 | 1·4 | 1·1 | 1·1 |
| IX. Cattle, Sheep, &c. | 3·2 | 3·6 | 2·1 | 1·7 | 2·1 |
| 17. STRAITS SETTLEMENTS. | | | | | |
| (*a.*) *Imports from—* | | | | | |
| 1. Tin, unwrought | 10·8 | 14·3 | 13·6 | 11·3 | 10·9 |
| 2. Raw Silk | 11·8 | 11·4 | 8·0 | 11·3 | 10·0 |
| 3. Silk (*manufactured*) | 6·3 | 5 6 | 4·3 | 2·6 | — |
| 4. Betel Nuts | 5·7 | 8·4 | 17·7 | 8·7 | 9·1 |
| 5. Pepper | 8·8 | 3·8 | 3·2 | 8·1 | 9·3 |
| 6. Coffee | 3·9 | 3·0 | 1·2 | 3·8 | 5·2 |
| 7. Camphor | 1·7 | 1·4 | 1·4 | 1·0 | 2·3 |
| 8. Cocoa-nuts | 3·0 | 2·1 | 2·0 | 1·7 | 1·8 |
| 9. Salt Fish | 6·5 | 5·1 | 5·2 | 5·5 | 6·2 |
| 10. Sugar (*refined*) | 5·1 | 2·5 | 3·5 | 5·4 | 6·7 |
| 11. Tea | 3·1 | 2·6 | 2·2 | 1·2 | 1·1 |
| 12. Nutmegs | 1·6 | 1·7 | 1·7 | 1·1 | 1·4 |
| 13. Apparel | 1·4 | 2·4 | 2·3 | 3 4 | 3·5 |
| 14. Canes, &c. | 1·8 | 1·5 | 1·1 | 0 9 | 1·0 |
| 15. Coloured Cottons | — | 0·8 | 0·9 | 2·0 | 2·5 |
| 16. Umbrellas | 1·2 | 1·7 | 1·3 | 1·1 | 1·7 |
| (*b.*) *Exports to—* | | | | | |
| I. Rice (*husked*) | 31·8 | 29·8 | 29·3 | 35·7 | 38·7 |
| II. Opium | 37·3 | 29·2 | 35·3 | 32·2 | 30·1 |
| III. Jade | 6·5 | 2·6 | 1·3 | 1·7 | 1·0 |
| IV. Gunny Bags | 4·3 | 5·7 | 3·1 | 4·8 | 5·2 |
| V. Foreign Cotton Goods | 4·1 | 5·4 | 5·3 | 3·7 | 2·8 |
| VI. Indian Cotton Goods | 2·7 | 4·1 | 5·2 | 3·0 | 3·7 |

TRADE WITH FOREIGN COUNTRIES—*continued.*

| COUNTRY AND ARTICLE. | 1881-82 | 1883-84. | 1885 86. | 1889-90. | 1891-92. |
|---|---|---|---|---|---|
| 18. HONG-KONG. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Raw Silk | 31·6 | 37 4 | 30·0 | 29·1 | 30·4 |
| 2. Silk Piece Goods | 16·5 | 22·2 | 21·4 | 25·0 | 22·8 |
| 3. Sugar (*refined*) | 15·2 | 13·9 | 15·6 | 10·6 | 9·7 |
| 4. Glassware | 5·6 | 4·1 | 4·8 | 5·2 | 5·3 |
| 5. Copper | — | — | — | 11·8 | 13·0 |
| 6. Camphor | 2·4 | 2·4 | 2·8 | 2·7 | 2·8 |
| 7. Fireworks | 2·2 | 1·9 | 2·6 | 2·2 | 2·4 |
| 8. Tea | 3·5 | 1·6 | 4·8 | 2·9 | 2·0 |
| (*b.*) *Exports to*— | | | | | |
| I. Opium | 72·5 | 71·1 | 68·5 | 59 1 | 59·4 |
| II. Indian Cotton Twist, &c. | 12·2 | 16·1 | 22·0 | 32·2 | 32·6 |
| III. Raw Cotton | 10·4 | 7·4 | 5·5 | 3·2 | 2·9 |
| IV. Gunny Bags | 1·3 | 1·9 | — | 1·4 | 1·3 |
| 19. CHINA, TREATY PORTS. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Raw Silk | 46·2 | 24·9 | 35·6 | 39·5 | 47·7 |
| 2. Silk Piece Goods | — | 1·5 | 1·6 | 3·1 | 3·3 |
| 3. Tea | 53·5 | 48·1 | 62·6 | 54·6 | 48·4 |
| (*b.*) *Exports to*— | | | | | |
| I. Opium | 99·6 | 98 1 | 88·8 | 64·9 | 50·6 |
| II. Indian Cotton Twist, &c. | — | — | 9·5 | 34·0 | 46·7 |
| III. Indian Cotton Piece Goods | — | — | 1·2 | — | 2·1 |
| 20. JAPAN. | | | | | |
| (*a.*) *Imports from*— | | | | | |
| 1. Fancy Ware | 21·9 | 14·9 | 16·9 | 10·3 | 10 5 |
| 2. Raw Silk | 22·4 | — | — | 21·7 | 22· |
| 3. Silk Piece Goods | — | — | — | 2·5 | 11·7 |
| 4. Apparel | 9·4 | 2·7 | 3·0 | 2·1 | 9·6 |
| 5. Coal | — | — | — | 26·0 | 13·5 |
| (*b.*) *Exports to*— | | | | | |
| I. Indian Cotton Twist, &c. | 93·6 | 85·4 | 96·8 | 80·1 | 11·9 |
| II. Raw Cotton | — | — | — | 15·2 | 77·0 |
| III. Gunny Bags | — | 4·1 | 0·9 | 3·3 | 0·9 |

Leaving now the sea-borne trade, since there is nothing in that of the coasts to call for special comment, we have to add a few lines on the land trade of India. The traffic from beyond the frontier is dealt with in the same review as the trade by sea, whilst the internal movements of trade are registered as stated in the beginning of this chapter, under the auspices of another department. We can thus trace a commodity imported by sea to the seaport from its country of shipment, without finding in the return any trace of what becomes of it after it has left the dock. Conversely, the foreign destination of an Indian product is known, but it is not stated from what part or parts of India it was collected. There is, in fact, no co-ordination of the two sets of returns.

Foreign trade by land.

The value of the trade from the trans-frontier tracts is specified marginally. The figures vary much from year to year, and are subject, moreover, to subsequent corrections after the year's registers have been overhauled by the supervising authorities. The trade is described as being, as a rule, of a peddling nature. There are, however, exceptions, as in the case of Kabul, Kandahar, Nipal, Kashmer, and the countries round Burma. But assuming that the same difficulties exist in all, namely, want of proper roads and the liability to heavy transit duties, even the efficient protection of the State in question is extended to the life and property of the adventurers. The marginal table gives the chief contributing countries. The principal item in the Kandahar trade is wool, and there is a demand, too, for fruit and nuts of different sorts. The exports from India are here, as in most cases of the kind, piece-goods. The Kabul trade is chiefly export from India, and consists of indigo, piece-goods, tea, and sugar. A good deal of salt also passes by this route, but the obstacles are many and serious to all traffic between India and North Afghanistan. From Kashmer comes timber and woollen goods, though the shawls, for which the valley is celebrated, have declined. There is a considerable colony of Kashmer weavers in Amritsar which may have something to do with the decline of the genuine article. The trade with Nipal is more general, but the main commodities bartered are salt, from India, and rice, from the north. The trade on the Siam frontier consists largely of teak timber, which is floated down the larger streams. It is not proposed to enter into further detail regarding this class of trade.

| YEAR. | Imports into India. | Exports from India. | Total Trans-Frontier Trade. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| 1881-82 - | 4,815,429 | 5,142,781 | 9,958,210 |
| 1882-83 - | 5,341,136 | 4,653,112 | 9,994,248 |
| 1883-84 - | 5,509,053 | 5,257,252 | 10,766,305 |
| 1884-85 - | 5,514,562 | 6,122,349 | 11,636,911 |
| 1885-86 - | 3,618,761 | 5,584,893 | 9,203,654 |
| 1886-87 - | 3,772,285 | 5,650,475 | 9,422,760 |
| 1887-88 - | 4,170,914 | 5,020,941 | 9,191,855 |
| 1888-89 - | 4,226,145 | 4,696,702 | 8,922,847 |
| 1889-90 - | 3,793,701 | 5,210,625 | 9,004,326 |
| 1890-91 - | 4,025,395 | 4,642,478 | 8,667,783 |
| 1891-92 - | 4,240,822 | 4,053,630 | 8,294,453 |

CHIEF CONTRIBUTING COUNTRIES.

| COUNTRY. | 1883-84. | 1891-92. |
|---|---|---|
| Kandahar, &c. - - | (?)353,813 | 972,659 |
| Kabul, &c. - - - | 858,546 | 1,077,247 |
| Kashmer - - - | 901,604 | 1,312,123 |
| Ladakh - - - - | 52,782 | 53,017 |
| Thibet - - - - | 137,286 | 180,237 |
| Nipal - - - - | 2,476,577 | 3,003,619 |
| North Shan State - - | 76,988 | 388,626 |
| Karen-ni - - - | 806,330 | 228,766 |
| Zimmé (Chang-mai) - | 204,313 | 227,393 |
| Siam - - - - | 302,403 | 119,815 |

The same remark, it is to be feared, must be made in connection with the internal trade of India, but for a different reason. The trans-frontier traffic is small and not at present of any commercial significance; but the rail and canal-borne trade of India is immense, and the detail available concerning it is of very considerable interest and value. Unfortunately, as has been already mentioned, it is contained in a series of tabular statements unaccompanied by comment, so that to unravel the tangled skein and to ascertain the true drift of the mass of figures regarding the movement of the main articles of trade between one part of the country and another is a piece of original work which is quite beyond the scope of this review. The following table, however, will serve to show the nature of the information to be extracted from the volume:—

EXTRACT, ILLUSTRATING THE MOVEMENTS OF COTTON PIECE-GOODS OF FOREIGN MANUFACTURE—1891-92.

| EXPORTING PROVINCE, &c. | IMPORTING PROVINCE, &c. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Madras.* | Bombay.* | Sindh.* | Bengal.* | N.W. Provinces. | Panjab. | Central Provinces. | Berar. | Assam. | Native States. | Chief Seaports. | Total Exported. |
| Madras* | – | – | – | – | – | – | – | – | – | – | 20 | 20 |
| Bombay* | – | – | – | – | – | – | – | – | – | – | 36 | 37 |
| Sindh* | – | – | – | – | – | 7 | – | – | – | – | – | 7 |
| Bengal* | – | – | – | – | 5 | – | – | – | 491 | – | 3 | 501 |
| N.W. Provinces and Oudh | – | – | – | 7 | – | 33 | 4 | – | – | 34 | 1 | 80 |
| Panjab | – | – | 1 | – | 265 | – | – | – | – | 73 | 4 | 344 |
| Central Provinces | – | – | – | – | – | – | – | – | – | 1 | – | 2 |
| Berar | – | – | – | – | – | – | – | – | – | – | – | |
| Assam | – | – | – | 1 | – | – | – | – | – | – | – | |
| TOTAL PROVINCES | – | – | 1 | 8 | 270 | 41 | 4 | – | 492 | 109 | 65 | 992 |
| Native States | 1 | 1 | – | – | 1 | – | 1 | – | – | – | – | 5 |
| Madras Seaports | 1,125 | 7 | – | – | – | – | 1 | – | – | 290 | 2 | 1,425 |
| Bombay | 28 | 1,014 | – | 2 | 455 | 650 | 452 | 260 | – | 1,025 | 11 | 3,898 |
| Karachi | – | – | 339 | – | 2 | 883 | – | – | – | – | – | 1,225 |
| Calcutta | – | – | – | 7,786 | 3,183 | 907 | 130 | 1 | 385 | 75 | 2 | 12,470 |
| TOTAL CHIEF SEAPORTS | 1,153 | 1,022 | 340 | 7,788 | 3,641 | 2,440 | 583 | 261 | 385 | 1,390 | 15 | 19,019 |
| GRAND TOTAL | 1,155 | 1,023 | 341 | 7,796 | 3,913 | 2,481 | 589 | 261 | 877 | 1,499 | 80 | 20,016 |

* Excluding chief seaport town or towns.
† The values are given in thousands of Rx., and small items are occasionally omitted from the detail, but included in the total.

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Here the total movements of European cotton piece-goods are shown to have amounted in value to Rx. 20,016,000. The distribution includes Rx. 19,019,000 from the chief seaports, and 997 from the stations in the interior, mainly between the Panjab and the North-West Provinces, and Bengal and Assam. The total imports of the Madras province are valued at Rx. 1,155,000, of which Rx. 1,125,000 come from the provincial seaports. These last, it appears from the table, supplied only the Province in question, a little to Bombay, and a fair amount (Rx. 490,000) to the States of Haidrabad and Mysore, &c. Bombay, on the other hand, dispensed goods over a far wider area, both in British Provinces and in Protected States. The Province drawing upon the widest selection of markets is the Panjab, which favours Karachi and Calcutta more than it does Bombay. On the other hand, Bombay drives its rival port nearly out of the field afforded by the Central Provinces. Tables of this sort can be made up for all the chief imported merchandise. As a specimen of its use with reference to exported produce, wheat may be selected and dealt with in the same manner. The results are to show that the amount moved in the year in question was valued at Rx. 13,499,078, of which Rx. 12,925,611 sought the seaports. The Panjab exported the value of Rx. 3,737,148, of which Rx. 2,941,656 went to Karachi. It imported from the North-West Provinces, Rx. 151,520, against Rx. 16,214, which it sent. Bombay city received Rx. 6,167,743; Karachi, 4,373,944; and Calcutta, 2,365,350. The above samples suffice to exhibit the scope of the returns, but space does not permit us to pursue the subject any further.

## Joint-Stock Companies.

The last subject to be treated in connection with Trade and Commerce is the number and description of joint-stock companies registered under the Indian Act. Joint Stock Companies.

### Registered Companies.

| Joint-Stock Companies Registered in India. | 1881-82. | 1882 83. | 1886-87. | 1887-88. | 1890-91. | 1891-92. | Paid-up Capital. | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | 1881-82. | 1891-92. |
| A.—Working: | | | | | | | Rx. | Rx. |
| 1. Banking and Insurance - - | 146 | 141 | 370 | 379 | 288 | 273 | 2,184,572 | 3,939,166 |
| 2. Mills and Presses - | 100 | 114 | 190 | 198 | 233 | 245 | 6,754,819 | 12,057,838 |
| 3. Mining, &c. - - | 19 | 19 | 25 | 23 | 63 | 57 | 739,180 | 1,615,895 |
| 4. Planting - - | 122 | 130 | 143 | 141 | 154 | 158 | 2,796,879 | 3,750,263 |
| 5. Trading - - - | 95 | 118 | 128 | 140 | 149 | 168 | 1,947,086 | 3,792,519 |
| 6. Others - - - | 23 | 25 | 30 | 29 | 41 | 49 | 1,259,220 | 1,429,345 |
| Total Working - | 505 | 547 | 886 | 910 | 928 | 950 | 15,681,756 | 26,585,026 |
| B.—Being wound-up, or otherwise not working - | 222 | 227 | 344 | 420 | 531 | 602 | — | — |
| C.—Dissolved, wound up, or never began work - | 422 | 451 | 507 | 531 | 774 | 808 | — | — |
| Grand Total - - | 1,149 | 1,225 | 1,737 | 1,861 | 2,233 | 2,360 | — | — |

The table given above shows that since 1881–82 the number of these companies that were actually at work in the respective years rose by 88 per cent. The capital paid up, however, increased by only 69 per cent. Taking this together with the fact that the total number of companies set on foot, including those that never began work at all, increased by 105 per cent., it appears that the speculative instinct has been somewhat strongly developed in the decade. What was said in a former chapter regarding the rush for gold mine shares in Bengal in the autumn of 1890 is enough to indicate the aptitude of certain classes of investors, both native and foreign, to put their trust in anything that professes to further the production of that precious metal. But the most healthy development of the joint-stock system has been in the textile industry and in banking, not to mention the numerous tea concerns, some of which have attracted local capital as well as European. The Mill Companies, for both cotton and jute, show a capital which has increased by over 30 per cent. in the last six years. The larger banking concerns are, necessarily, in the chief Presidency towns. There seems to have been a tendency at one time to form small local corporations of this sort in Madras and the adjacent State of Mysore, but since 1885, when they began to be registered, the number has decreased considerably. As a rule, they were nothing more than money-lending concerns with a local *clientèle*, and seldom more than 20 shareholders each. The head of trading companies includes both the steamship and tramway concerns, and the still more numerous class of retail shops that have taken to registration a good deal during the last six or seven years. Almost all the planting companies are registered in Bengal, where tea and indigo form the chief inducements to invest capital in landed estates thus managed. Mining and quarrying companies, again, are chiefly found in Bengal, where there appears to be considerable scope for their operations, both in the market above and in the earth beneath. The following table gives the distribution of these companies in the last year of the decade. The paid-up capital amounts to

JOINT STOCK COMPANIES.

74 per cent. of the nominal issue, and the provinces of Bombay and Bengal together absorb nearly 85 per cent. of the former, but contain only 54 per cent. of the total number of companies floated, and 59 per cent. of those actually at work.

PROVINCIAL DISTRIBUTION OF JOINT STOCK COMPANIES IN 1891–92.

| COMPANY. | TOTAL. | Bombay. | Bengal. | Madras. | North-West Provinces and Oudh. | Panjab. | Burma. | Assam, Ajmer, and Bangalore. | Central Provinces and Berar. | Mysore. | Capital. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Nominal. | Paid up. |
| A. WORKING: | | | | | | | | | | | Rx. | Rx. |
| 1. Banking and Insurance - | 273 | 13 | 29 | 138 | 9 | 4 | 1 | *14 | – | 65 | 6,936,262 | 3,939,167 |
| 2. Trading - - - - | 168 | 46 | 49 | 24 | 21 | 5 | 14 | 1 | 5 | 3 | 5,029,205 | 3,792,519 |
| 3. Mills and Presses - - | 245 | 151 | 36 | 25 | 13 | 6 | – | 5 | 7 | 2 | 15,001,863 | 12,057,838 |
| 4. Planting - - - | 158 | 3 | 144 | 6 | 3 | 1 | – | – | – | 1 | 4,531,907 | 3,750,263 |
| 5. Mining, &c. - - - | 57 | 2 | 46 | 8 | – | 1 | – | – | – | – | 2,776,250 | 1,615,895 |
| 6. Ice Manufacture - - | 12 | 5 | 4 | – | 1 | 1 | – | 1 | – | – | 254,750 | 197,183 |
| 7. Sugar - - - - | 2 | – | 1 | 1 | – | – | – | – | – | – | 212,500 | 160,636 |
| 8. Breweries - - - | 3 | – | – | – | 2 | 1 | – | – | – | – | 170,000 | 169,540 |
| 9. Others - - - - | 32 | 9 | 13 | 1 | 6 | 1 | 2 | – | – | – | 1,111,100 | 901,985 |
| TOTAL WORKING - - | 950 | 229 | 322 | 203 | 55 | 20 | 17 | 21 | 12 | 71 | 36,023,837 | 26,585,026 |
| B. DISCONTINUED - - | 602 | 162 | 138 | 180 | 14 | 15 | 8 | 15 | – | 70 | – | – |
| C. WOUND UP OR NEVER STARTED - - - | 808 | 238 | 191 | 282 | 33 | 32 | 5 | 3 | 1 | 23 | – | – |
| GRAND TOTAL - - | 2,360 | 629 | 651 | 665 | 102 | 67 | 30 | 39 | 13 | 164 | – | – |
| Percentage of Total paid-up Capital invested in each Province - - - - | 100·0 | 40·6 | 44·1 | 7·2 | 3·7 | 1·6 | 0·6 | 0·1 | 0·9 | 1·2 | – | – |

* Civil and Military Station of Bangalore.

# CHAPTER XVI.

## PUBLIC WORKS.

PUBLIC WORKS.

THE Department of Public Works, now that the Military Works Branch has been placed under separate control, is subdivided into three main sections. First, the Railway Department, which is under the direct control of the Government of India throughout the country. Secondly, the Department of Irrigation, and lastly, that of Roads and Buildings, both of which sections are under Provincial management, and grouped, accordingly, into territorial establishments. The following table gives the number of the officials engaged

| CLASS. | Government of India. | | Madras. | | Bombay. | | TOTAL. | |
|---|---|---|---|---|---|---|---|---|
| | 1890-91. | 1891-92. | 1890-91. | 1891-92. | 1890-91. | 1891-92. | 1890-91. | 1891-92. |
| Royal Engineers - | 66 | 61 | 16 | 12 | 8 | 8 | 90 | 81 |
| Other Military - | 17 | 9 | — | — | — | — | 17 | 9 |
| Civilians appointed in England. | 367 | 358 | 56 | 59 | 51 | 49 | 474 | 466 |
| Europeans appointed in India. | 210 | 204 | 3 | 4 | 6 | 6 | 219 | 214 |
| Natives of India - | 68 | 65 | 6 | 8 | 23 | 25 | 97 | 98 |
| TOTAL - - - | 728 | 697 | 81 | 83 | 88 | 88 | 897 | 868 |

in the engineering branch of the Public Works Department, as a whole. In addition to these, there is a considerable staff occupied with the accounts, which in so large and varied a sphere of action are peculiarly difficult to supervise efficiently, both from their great mass and from their intricacy and complexity. For example, as railways and the more important of the irrigation works are constructed partly out of revenue partly from borrowed money, two sets of accounts are kept for each work, one relating to the revenue, the other to the capital involved. The third section of this department, known by the name given above, of the Roads and Buildings, is by no means confined in its duties to those undertakings, but is charged with the carrying out of all civil works and repairs which do not fall within one of the two sister branches.

The amount annually devoted to Public Works is very considerable, as the marginal table will show. In the chapter on Finance mention was made of the place held with respect to railway and irregational enterprise by the items of interest and exchange. For further detail it is better to take the three branches separately.

ACCOUNTS OF 1891-92.

| HEAD. | Revenue. | Expenditure. | | TOTAL. |
|---|---|---|---|---|
| | | Against Revenue. | From Capital. | |
| | *Rx.* | *Rx.* | *Rx.* | *Rx.* |
| Railways - - | 19,938,046 | 20,253,910 | 2,770,336 | 23,124,246 |
| Irrigation Works - | 2,272,040 | 2,945,019 | 729,664 | 3,674,683 |
| Roads, Buildings, &c.: | 627,124 | 6,208,752 | — | 6,208,752 |
| (a) *Military* | *49,794* | *1,214,518* | — | *1,214,518* |
| (b) *Civil* - | *577,330* | *4,994,234* | — | *4,994,234* |
| TOTAL - - - | 22,837,210 | 29,407,681 | 3,500,000 | 32,907,681 |

## RAILWAYS.

RAILWAYS.

Since the introduction of railways into India, in the time of Lord Dalhousie, their construction has been conducted on three different systems, adopted at various

RAILWAYS.

various intervals. First, the employment of Companies under a system of guarantee of interest; secondly, by the State through its own officials; and, thirdly, by assisted Companies, either with or without guarantee or subsidy from the State. Out of eight lines constructed on the first system, five have been purchased, according to one of the conditions of the agreement, by the State. Two of these are worked by Companies. The more important, the East Indian line, is carried on by the same company that constructed it in the first instance, on special terms as to the sharing of profits. The second, the South India line, is in the hands of a new company, whose capital was subscribed by the shareholders of the old one. The three remaining lines are worked by the State, and all five come into the category of State lines in the accounts of the Government of India.

Railways in India are approaching their fortieth year of life, as the first length from Bombay to Thana on the opposite mainland, was opened for public traffic in the year 1853. The year after, the East Indian line commenced work on 38 miles, and the Madras Railway opened 65 miles in 1856. The metre gauge was adopted on the South Indian line in 1861, and the special gauge of 4 ft. 6 in. at Nalhati three years later. Narrower gauges have been introduced in special localities from time to time, either to suit the light local traffic, as in the case of the Gaikwar's line, or the nature of the country, as on the Darjiling railway.

The following table gives the progress of construction at different periods, and the cumulative outlay of capital thereon, as well as on the purchase of the guaranteed lines. This latter detail has not been distributed year by year before 1879-80, when the East Indian line was taken over.

| YEAR. | Mileage open for Public Traffic at end of each Year. | | | | Capital Outlay (in Thousands). | |
|---|---|---|---|---|---|---|
| | 5′6″ Gauge. | Metre Gauge. | Special Gauges. | Total Mileage. | Total Amount to Date on Construction.* | Annual Progress* in Construction and Purchase. |
| | | | | | Rx. and £. | Rx. and £. |
| 1853 | 20 | — | — | 20 | — | — |
| 1856 | 273 | — | — | 273 | — | — |
| 1857 | 288 | — | — | 288 | — | — |
| 1861 | 1,539 | 49 | — | 1,588 | — | — |
| 1862 | 2,254 | 82 | — | 2,336 | — | — |
| 1863 | 2,441 | 82 | 27 | 2,550 | — | — |
| 1865 | 3,245 | 101 | 27 | 3,373 | — | — |
| 1867 | 3,747 | 162 | 27 | 3,936 | — | — |
| 1871 | 4,864 | 186 | 27 | 5,077 | — | — |
| 1873 | 5,370 | 277 | 47 | 5,694 | — | — |
| 1875 | 5,679 | 792 | 47 | 6,518 | — | — |
| 1877 | 5,765 | 1,510 | 47 | 7,322 | — | — |
| 1881 | 6,973 | 2,776 | 137 | 9,891 | 137,568 | 8,736 |
| 1882 | 7,101 | 2,906 | 137 | 10,144 | 140,677 | 3,109 |
| 1883–84 | 7,363 | 3,329 | 136 | 10,828 | 146,103 | 5,426 |
| 1884–85 | 7,792 | 4,036 | 172 | 12,000 | 154,397 | 8,294 |
| 1885–86 | 7,890 | 4,287 | 198 | 12,375 | 163,498 | 9,100 |
| 1886–87 | 8,372 | 4,768 | 247 | 13,387 | 173,418 | 9,920 |
| 1887–88 | 9,018 | 5,107 | 251 | 14,376 | 181,464 | 8,046 |
| 1888–89 | 9,501 | 5,489 | 251 | 15,241 | 188,402 | 6,938 |
| 1889–90 | 9,978 | 5,842 | 276 | 16,096 | 193,854 | 5,452 |
| 1890–91 | 10,125 | 6,564 | 288 | 16,977 | 198,805 | 4,951 |
| 1891–92 | 10,104 | 7,172 | 288 | 17,564 | 203,244 | 4,439 |

* From Financial Statement of 1893–94, which classes Rx. with £.

It must be mentioned in connection with the capital account above given that the outlay is set forth in sterling in the case of the guaranteed and assisted Companies, and in rupees in that of State lines. The more accurate way of showing the capital, therefore, is as follows; the statement, including foreign and Protected State works, and being carried up to the end of December 1891

1891, that being the period used in the Director-General's report for 1891-92, only part of which relates to the financial and the rest to the calendar year. RAILWAYS.

| | Rx. |
|---|---|
| State railways, constructed or purchased by the State | 133,546,074 |
| State railways constructed by Companies | 28,113,763 |
| Guaranteed Companies | 49,205,868 |
| Assisted and subsidised Companies | 5,607,036 |
| Native States' railways (Kathiawar, Rajputana, Central India, Jammu, &c.) | 8,600,251 |
| Foreign lines (Portuguese and Pondicherry) | 1,689,068 |
| Railway surveys, collieries, &c. | 907,705 |
| TOTAL Rx. | 227,669,765 |

We can now revert to the financial year in treating of the detail of the account. The amount of capital raised by railway Companies on which interest has been guaranteed by the State was thus composed at the end of the year 1891-92 :— Guaranteed Companies.

| | £. |
|---|---|
| The old guaranteed Companies | 45,159,180 |
| Bengal Central Company | 500,000 |
| Bengal Nagpur | 4,500,000 |
| Southern Maratha | 5,643,100 |
| Indian Midland | 5,754,100 |
| Assam-Bengal | 102,905 |
| TOTAL £. | 61,659,285 |

But this statement does not include the capital raised by the East Indian, Eastern Bengal, and the Sindh Companies, whose undertakings have been purchased by means of annuities, nor that raised by the Oudh and Rohilkhand or the South Indian Companies, for whose lines a cash payment was made. The amount of annuity outstanding at the end of the year under discussion was 1,600,750*l.* Considerable portions have been exchanged, since the purchase, for India Stock.

The Guarantee.

A few lines may be suitably added with regard to the guarantee and the State power of purchase, above mentioned. In the earlier agreements the guarantee of interest is made for 99 years, and applies to all monies paid into the State Treasury with the sanction of Government, and the amount paid for guaranteed interest is not subject to any deduction except in the case when the gross receipts fall short of the working expenses. If the net receipts exceed the amount due to it for guaranteed interest in any half year, one half the surplus is payable to the Company and the other moiety goes to the State in payment of the advances of guaranteed interest, with simple interest thereon. If all such advances have been repaid, the whole of the surplus goes to the Company. In the chapter on Finance it was mentioned that a certain portion of the exchange transactions appertained to real loss or gain arising out of "contract rates." In all the above agreements, it should now be explained, the rupee was taken to be the equivalent of 1*s.* 10*d.* As regards the power of purchase under the above agreements, the Company may, after a line has been opened for three months, surrender the works to the State on giving six months' notice, and receive back the capital expended on it with the Government's sanction. In case of default, too, on the part of the Company, the State may take possession on repayment of the capital expended. Within six months of the expiration of the 25th or 50th year from date of contract, the State may give notice of its intention to purchase the line at the close of the next half-year. The payment to be made may be either the equivalent of the value of all the share capital, calculated on the mean market rate of the three years preceding the expiration of the period mentioned, or it may be by annuity for

Railways.

the remainder of the 99 years of the term of contract. The agreement contains a provision that the land, with the works thereon and the rolling-stock at a valuation shall revert to the State on the expiration of 99 years, but obviously the Company's power of surrender precludes much chance of this condition taking effect. Some modifications were introduced into the original terms in 1869-70, after the operations of the Companies had been very materially extended The right to more than the half of the surplus profits, in case of the advances being entirely repaid, was foregone, and the State, in its turn, waived its right of purchase at the end of the first 25 years of the lease. Three of the Companies accepted these changes. In 1879-80 the State purchased the East Indian line; in 1884, the Eastern Bengal; in 1885, the Sindh, Panjab, and Delhi; the Oudh and Rohilkhand in 1888, and the South Indian in 1890. The State can acquire the other lines of this class at the following dates. The Great Indian Peninsula in June 1900; the Bombay, Baroda, and Central India, at the end of 1905; and the Madras line at the end of December 1907. At the time this is written the shares of the first are quoted at 183½, of the second at 188¾, and of the last at 146.

The later Guarantee.

The rest of the statement of capital, irrespective of the 45,159,180*l.* raised by the "old" guaranteed companies, on the terms described above, refers to the State lines constructed by companies, who are credited with 16,500,105*l.* The Bengal Central, however, is only a State line under a revised agreement executed in 1887, under which the State has the right to purchase at par in 1905, or any succeeding tenth year up to 1980. In the meanwhile, the guarantee extends to 3½ per cent. on the paid-up share capital with one-fourth the net earnings. The Southern Maratha Company, like the two others, was constructed on behalf of the State. It has the same guarantee as to interest and share of surplus profits as the Bengal Central, and up to the end of the year 1890 this share was under the agreement to be made up by the State to one-half per cent. on the capital. The option of purchase at par extends to the twenty-fifth, thirty-fifth, or forty-fifth year. The Indian Midland and the Bengal-Nagpur have a guarantee of 4 per cent. on their share capital with one-fourth surplus profits. The lines may be purchased at par in 1910 and 1913 respectively, or thereafter at 10 years' intervals. The Assam-Bengal Company has raised 1,500,000*l.* share capital, on which interest at 3 per cent. is guaranteed, together with an additional one-half per cent. till the middle of 1898. Further capital is to be supplied by the Secretary of State, or raised under his guarantee. If the net earnings more than suffice to pay the above interest on the capital, however contributed, the surplus is to be divided rateably, according to the amount of capital contributed by the two parties. The first year in which the option of purchase can be exercised is 1921, and thereafter at 10 years' intervals, as in the other cases.

Secretary of State's Loans.

Under Act 51 Vict. c. 5, sec. 4, the Secretary of State is empowered to raise sums not exceeding ten millions sterling for the construction, extending, or equipping railways in India through the agency of Companies, or for the discharge of debentures issued by such Companies under the guarantee of the Secretary of State. The sums thus advanced, on interest payable by the Companies in question, amounted to 7,130,380*l.* up to September 1892, the Bengal-Nagpur and the Southern Maratha lines being the main applicants.

Railway working in 1891-92.

The working of the lines of which the system of construction and finance has been dealt with above, forms the subject of an elaborate Report that is prepared by the Director General of Railways in India, and submitted annually to the Houses of Parliament. It is unnecessary, therefore, to enter into this matter in the present review, none the less because the Report for the year succeeding that with which the decade closes, has been already presented. In a previous chapter the results of the working from a financial standpoint were mentioned, and the main feature, that is the loss by reason of the fall in the value of the rupee as compared with the sovereign, was duly set forth. Not to break the continuity of the series of these reviews, however, it may be stated that the length of new line opened was 678 miles, against 874 in 1890-91. Of the total at the end of the year in question, that is, on the 31st of March 1892, the State owned 13,106 miles, of which it worked 4,701, and 2,968 miles were in the hands of companies. The balance of 1,490 miles lies in foreign or Protected States. There were also 2,695 miles under construction. The gross receipts

receipts exceeded those of the previous year by over 16 per cent. and the net earnings showed a corresponding increase of 23 per cent., and averaged 5·76 per cent. on the capital expended on the line open, as compared with 4·85 the year before.* It is worth pointing out that the East Indian line with its branches produced 10 per cent., the Guaranteed Companies, 7·23, and the State lines, other than the East Indian, 4·16 per cent. The proportion yielded by the assisted lines was 4·86 and of the Protected States' lines, 3·3. The increase of the passenger traffic amounted to 7 per cent., whilst the brisk movement of produce caused by the abnormal demand on the continent of Europe, raised the goods return by 16 per cent., and the traffic in grain and seeds advanced by 44¾ per cent. The Bengal-Nagpur and the Ambala-Kalka lines were opened through, and the Khojak tunnel was completed during the year. These were the principal events that receive notice in the departmental report, but the number of works in progress and of the surveys being made, form a long and interesting chapter in that work. As regards the fuel consumption, which is a matter of interest in connection with the mining industry mentioned in a former chapter, it appears that in 1891-92 the increase was nearly 23¼ per cent., in which the imported product showed to the extent of 24·4, and the Indian of 22·6. The East Indian line, however, used the outturn from its own collieries exclusively; the Bengal-Nagpur, again, supplemented the local supply with coal from Umaria and Warora. Umaria was also the chief source of the coal used by the Indian Midland. The Bombay-Baroda used chiefly English fuel, and so did the Rajputana Malwa for most of its length. The Great Indian Peninsula took its fuel from a variety of sources, though English coal predominated. The principal fuel on the Southern Maratha and the Madras lines was wood locally obtained. On some sections of the latter, however, Singareni coal is in favour, as on the Nizam's line.

Railways.

Fuel.

In connection with railway progress in India, a subject of some considerable interest is the number of the persons employed by the different lines and their distribution by race. In 1891, for instance, it appears that the total number thus engaged was 260,600, of whom 250,036 were natives of India, 4,626 Europeans, and 5,936 Eurasians. Thus, the railways at present provide an outlet for considerably more than the population affected by the factories, and as the staff per mile is fairly uniform in strength, it may be assumed that, with every mile of line opened to the public, employment will be available for 15 more persons; that is, as they are chiefly adults, and probably the working heads of families, some 75 people will be directly benefited by the extension of the railway system by that distance. The State Railway Provident Fund claims a word of notice in consideration of the attention that has been given to similar institutions in the United Kingdom of late. The number of depositors on the State Lines were in 1891-91, 19,966 out of a total of 189,589. The amount at their credit was Rx. 397,578, including Rx. 147,935 as bonus. The European and Eurasian employés of the railways are largely enlisted amongst the volunteers, and numbered 9,525 in 1891-92, out of whom 8,903 were accounted efficients.

Railway Staff.

Finally, we come to the chapter of accidents, of which a summary is given in margin. The number of train accidents was 4,298, of which 166 were of a nature to be reported to the Local Government under the Railway Act of 1890. For every 100,000 train-miles run, there were thus seven accidents. So far as passengers are in question, one was killed or injured for every 27 millions of miles run. It is necessary to conclude this summary, which is admittedly brief in relation to the importance of the subject, with a few statistics illustrating the progress made by railways during the last 12 years, that is since the first purchase by the State of a line as a "going concern." The most succinct way of bringing the figures forward is by throwing them into a proportional shape, using the year 1880-81,

Accidents.

| Class. | Killed. | Injured. | Total. |
|---|---|---|---|
| A. PASSENGERS: | | | |
| 1. Accidents to trains | 56 | 135 | 191 |
| 2. Other causes | 65 | 212 | 277 |
| Total | 121 | 347 | 468 |
| B. EMPLOYÉS: | | | |
| 1. Accidents to trains | 27 | 94 | 121 |
| 2. Other causes | 156 | 529 | 685 |
| Total | 183 | 623 | 806 |
| C. OTHERS: | | | |
| 1. At level crossings | 17 | 16 | 33 |
| 2. Trespassers | 236 | 82 | 318 |
| 3. Suicides | 66 | 0 | 66 |
| 4. Others | 22 | 16 | 38 |
| Total | 341 | 114 | 455 |
| GRAND TOTAL | 645 | 1,084 | 1,729 |
| „ „ 1890-91 | 454 | 775 | 1,229 |

* But for general financial result, *see* page 212.

Railways.

as the standard. The following table, then, which is based on the returns found in the Statistical Abstract, gives the variations from the figures of that year in the case of miles worked, passengers and goods carried, and net earnings.

Variation from 1880–81=100.

| Year. | Miles Worked. | Passengers Carried. | Goods Carried. | Net Earnings. |
|---|---|---|---|---|
| 1880–81 | 100 | 100 | 100 | 100 |
| 1881–82 | 104 | 113 | 112 | 110 |
| 1882–83 | 108 | 124 | 129 | 121 |
| 1883–84 | 112 | 141 | 126 | 114 |
| 1884–85 | 117 | 155 | 143 | 131 |
| 1885–86 | 128 | 169 | 148 | 141 |
| 1886–87 | 143 | 182 | 153 | 135 |
| 1887–88 | 146 | 197 | 169 | 142 |
| 1888–89 | 147 | 212 | 168 | 145 |
| 1889–90 | 171 | 218 | 171 | 149 |
| 1890–91 | 179 | 233 | 197 | 182 |
| 1891–92 | 186 | 242 | 198 | 177 |

Variation in 11 years.

The vast increase in passenger traffic is the most prominent characteristic, and when we consider the two principal facts connected with it, the result is most satisfactory. First, the bulk of the traffic is third or lowest class, in which the rates vary between Rs. 0·0078 and Rs. 0·0156 per mile, or, if the rupee be taken as equivalent to 2*s.*, from 1*s.* 6¾*d.* to 3*s.* 1½*d.* for 100 miles. Then, again, the principal holiday of the Indian peasant, and equally one of his principal religious duties, be he Brahmanic or Musalman, is the performance of a pilgrimage to the shrine of his caste or tribal protecting divinity or patron saint, as the case may be. On these occasions he almost invariably takes his wife and family with him, and formerly the journey to the more frequented temples or bathing-places was a matter not only of months, but of considerable danger and hardship. In the present day, the lower class carriages are thronged in the open season with families making, as a matter of course between two harvests or during the lull in the agricultural year, a journey which would have been the crowning act of faith of a lifetime in the last generation. The indirect stimulus given by railways to the use of cattle and carts during the same period in the year has been already mentioned in connection with agriculture. The goods traffic, like the coaching, has advanced more rapidly than the completion of open line, and the same may be said of the net earnings, though the last year shown, which does not belong to the period with which this review is strictly speaking concerned, did not quite come up to its predecessor in this respect.

Distribution of open line.

We may conclude with a comparison between the different parts of India in the matter of railway communication; but first it may be stated that there was in 1891–92 one mile of rail to 77 square miles of country, excluding the hill tracts where construction is for the present out of the question. There was also one station to every 559 square miles. The marginal table serves to show that Bombay and the North-West Provinces are the best off in this respect, whilst the worst off, excluding Assam and Burma, which have their rivers, are Haidrabad, Rajputana, and Central India, with Sindh and Berar close behind the last-named.

Square Miles to each Mile of Railway open in 1891–92.

| Provinces. | Square Miles. | States. | Square Miles. |
|---|---|---|---|
| Madras | 63 | Haidrabad | 164 |
| Bombay | 35 | Mysore | 76 |
| Sindh | 102 | Central India | 109 |
| Bengal | 61 | Rajputana | 139 |
| North-West Provinces | 40 | Kathiawar | 48 |
| Panjab | 51 | | |
| Central Province | 77 | India* | 77 |
| Assam | 430 | | |
| Burma | 274 | | |
| Berar | 107 | | |

* Excluding hill tracts.

## IRRIGATION WORKS.

Irrigation Works.

In previous chapters the importance of irrigation has been dealt with in connection with agriculture, whilst the share of the public funds spent on works designed to supply this benefit has received notice under the head of Finance. A few more details may be usefully added here to the last subject, and the rest of the section devoted to the brief consideration of the works themselves and their results.

Irrigation has been practised in India, on a greater or less scale, probably ever since cultivation spread over the plains. In the most remote hill tracts, also, simple but very efficient means are employed of taking advantage of the natural supply of water to be obtained in such a region. We find such systems in force in the Kabul Valley in the north-west, and on much the same lines in the Naga Hills in the extreme north-east. In India itself, the large works are, for the most part, the creation of British engineering prowess, though amongst them are several that have been developed from beginnings made many generations ago. But in what may be termed the middle-class works, especially in the south of the peninsula, much has been done in a practical manner on an unusually extended scale by the predecessors of the present *régime*, and later efforts have been chiefly directed to the consolidation and extension of the original plan.

In the classification adopted in the Department of Public Works, which is that with which the present section has to deal, irrigational undertakings are grouped as major or minor. The distinction between the two is not easy to define in general terms, but, on the whole, it may be said to be based on the engineering quality of the work, rather than its extent. In most cases, too, there is the fiscal distinction that in the case of the former, loan capital, or an assignment from the Famine Insurance Allotment is employed, and both revenue and capital accounts are kept, whereas in that of the minor works the cost of construction and maintenance is usually met from revenue, and distinct accounts are not kept. There is in some cases a minimum area irrigable from the work which decides whether the latter should be placed under the Public Works Department at all, or left to the care of the district staff.

The following Table gives the figures for both classes of work for the last year of the decade :—

ACCOUNTS for 1891–92.

| HEAD. | Madras. | Bombay and Sindh. | Bengal. | N.W. Provinces and Oudh. | Panjab.* | Burma. | India, General. | TOTAL. |
|---|---|---|---|---|---|---|---|---|
| A. MAJOR WORKS. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1. Estimated Cost of Construction. | 4,234,271 | 2,763,497 | 7,019,986 | 7,338,627 | 8,010,236 | — | — | 29,366,617 |
| 2. Capital Outlay : | | | | | | | | |
| During 1891–92 | 225,842 | 21,934 | 84,223 | 48,625 | 452,423 | — | — | 833,047 |
| To end of 1891–92 | 5,656,109 | 2,592,561 | 6,083,013 | 7,397,699 | 6,428,983 | — | — | 28,158,459 |
| 3. Direct Receipts | 28,551 | 44,400 | 160,271 | 591,902 | 579,613 | — | — | 1,404,737 |
| 4. Land Revenue debited to Irrigation. | 471,875 | 70,148 | — | 114,581 | 25,106 | — | — | 681,710 |
| 5. *Deduct Charges of Collection* | — | *8,521* | — | — | — | — | — | *8,521* |
| TOTAL REVENUE | 500,426 | 106,027 | 160,271 | 706,483 | 604,719 | — | — | 2,077,926 |
| Working Expenses | 117,589 | 43,616 | 135,417 | 251,785 | 213,038 | — | — | 761,445 |
| Interest on Debt | 221,729 | 103,264 | 241,636 | 294,935 | 248,110 | — | — | 1,109,678 |
| Results, including Interest : | | | | | | | | |
| Excess Revenue | 161,108 | — | — | 159,763 | 143,571 | — | — | 206,803 |
| Excess Expenditure | — | 40,853 | 216,782 | — | — | — | — | — |
| B. MINOR WORKS. | | | | | | | | |
| 1. Gross Receipts, 1891–92 | **16,063** | **21,701** | **94,831** | **17,581** | **33,589** | **7,845** | **2,504** | **194,114** |
| 2. Expenditure : | | | | | | | | |
| 1. Irrigation and Navigation | 354,770 | 1,465,421 | 80,152 | 18,059 | 81,747 | 55,838 | 36,834 | 773,942 |
| 2. Agricultural | 47,743 | 18,883 | 78,625 | 10,625 | 461 | 143,887 | — | 299,954 |
| GRAND TOTAL | **402,243** | **165,300** | **158,777** | **28,684** | **82,208** | **199,725** | **36,834** | **1,073,771** |

* The figures for the Panjab are exclusive of the contributions towards the Sirsa and Sirhind Canals.

Irrigation Works.

It appears that the percentage of the surplus was, on the whole, 0·73 per cent. The highest return is in Madras, where it rises to 2·85. It is fairly high, too, in the great irrigational provinces of the Panjab and North-West, with 2·16 and 2·23 respectively. The worst proportion is found in the Bengal canals, where the percentage of excess expenditure was 3·56. In Bombay and Sindh the return was 1·58.

Excess.

In the next Table, the amount chargeable against revenue only is given according to the class of work for the last 11 years.

Irrigation Expenditure chargeable to Revenue Distribution.

| Year. | Expenditure. | | | Distribution. | | |
|---|---|---|---|---|---|---|
| | Major Works. | Minor Works. | Total. | Imperial. | Provincial. | Local. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1881–82 - - - | 1,258,346 | 790,010 | 2,048,356 | 957,168 | 1,086,839 | 4,349 |
| 1882–83 - - | 1,348,450 | 901,405 | 2,249,855 | 1,096,016 | 1,152,406 | 1,433 |
| 1883–84 - - | 1,408,512 | 751,267 | 2,159,779 | 1,159,834 | 997,324 | 2,621 |
| 1884–85 - - | 1,503,784 | 745,200 | 2,248,984 | 1,217,829 | 1,029,509 | 1,646 |
| 1885–86 - - | 1,557,997 | 745,750 | 2,303,747 | 1,265,633 | 1,035,009 | 3,105 |
| 1886–87 - - | 1,619,364 | 691,290 | 2,310,654 | 1,319,676 | 987,285 | 3,693 |
| 1887–88 - - | 1,695,149 | 766,497 | 2,461,646 | 1,132,499 | 1,327,350 | 1,788 |
| 1888–89 - - | 1,762,393 | 860,571 | 2,622,964 | 1,199,080 | 1,422,918 | 966 |
| 1889–90 - - | 1,788,241 | 864,466 | 2,652,707 | 1,201,982 | 1,446,108 | 4,617 |
| 1890–91 - - | 1,839,852 | 902,276 | 2,742,128 | 1,224,448 | 1,509,546 | 8,224 |
| 1891–92 - - | 1,871,123 | 1,073,896 | 2,945,019 | 1,332,720 | 1,603,168 | 9,131 |

The main feature is the growth of Provincial and, for the last three years, of Local expenditure also. The improvement is greater in the case of major works, the charge on account of which has risen by 48 per cent., than in the minor, where the ratio of increase is but 36.

In the chapter on agriculture it was stated that the area irrigated bore to the total under crops for which returns are available a proportion of one-fifth. This is exclusive of the area returned as under crops in Bengal, in the Bihar division of which province there is irrigation to a considerable extent from the Sone works. A brief review of the main features of each Province will serve to show the distribution of this area. The following Table gives the length of the canals and their distributaries at work during the year 1891-92, together with the acreage actually irrigated from them during that period.

State Canals, 1891-92.

| Province. | Mileage. | | | | | | | | | Acreage Irrigated. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Major. | | | Minor. | | | Total. | | | | | |
| | Canals. | Distributaries. | Total. | Canals. | Distributaries. | Total. | Canals. | Distributaries. | Total. | Major. | Minor. | Total. |
| Madras - - - | 1,971 | 5,520 | 7,491 | 1,288 | 1,196 | 2,484 | 3,259 | 6,716 | 9,975 | 2,413,591 | 378,998 | 2,792,589 |
| Bombay - - - | 265 | 168 | 433 | 215 | 219 | 434 | 480 | 387 | 867 | 68,537 | 27,488 | 96,025 |
| Sindh - - - - | 360 | 351 | 711 | 2,444 | 2,713 | 5,157 | 2,804 | 3,064 | 5,868 | 466,083 | 1,699,548 | 2,165,631 |
| Bengal - - - | 748 | 2,381 | 3,129 | 168 | — | 168 | 916 | 2,381 | 3,297 | 736,381 | 23,736 | 760,117 |
| N.W. Provinces - - | 1,400 | 6,180 | 7,580 | 20 | 522 | 542 | 1,420 | 6,702 | 8,122 | 1,912,851 | 132,179 | 2,045,030 |
| Panjab - - - | 1,273 | 5,364 | 6,637 | 2,630 | 603 | 3,233 | 3,903 | 5,967 | 9,870 | 1,963,041 | 1,104,295 | 3,067,336 |
| Ajmer - - - | — | — | — | — | — | — | — | — | — | — | 11,987 | 11,987 |
| Total - - - | 6,017 | 19,964 | 25,981 | 6,765 | 5,253 | 12,018 | 12,782 | 25,217 | 37,999 | 7,560,484 | 3,378,231 | 10,938,715 |
| Total, 1882-83 - - | 5,129 | 14,119 | 19,249 | 3,257 | 2,225 | 5,482 | 8,376 | 16,344 | 24,720 | 5,228,781 | 1,791,392 | 6,920,173 |

In

In the Bengal account, some 243 miles of canal, and in Madras 317 are used for navigation only. In other provinces, even where the canal is navigable, it is intended and chiefly used for irrigation. At the foot of the Table is a line giving the corresponding figures 10 years ago, from which the progress made will be seen to have been an increase of 52 per cent. in mileage of canals, of 54 in distributary channels, and of 58 in the area irrigated from these works. In noticing the different provinces, a beginning will be made with the Panjab and the Sindh, those being the most thirsty and dependent on the supply of water. They are also the only two regions in which irrigation is obtained from the inundation of a great river. In the Panjab this feature is confined to the south-western tracts, but in Sindh, as in Egypt, the cultivation of almost the whole country varies with the flood. Irrigation Works.

In the Panjab only 386 miles of canal are returned as navigable, and of the whole length, 2,796 miles rank as inundational, and 1,107 as perennial. In the latter category, necessarily, the mileage of distributaries is much greater than in the former, and is returned as 5,211 against 756. Amongst the perennial works the chief are the Western Jamna, of 280 miles; the Bari Doab, of 362; the Sirhind, of 542, out of which 223 lie within the confines of Protected States. The more important inundational undertakings run somewhat longer. The Muzaffargarh system, for instance, spreads over 826 miles; the Indus and the Lower Satlaj systems each exceed 720. During the year 1891–92, in addition to the completion of the great Chinab weir, two years before the date originally anticipated, considerable progress was made with the Sirsa branch of the Western Jamna system, to which it is to contribute an extra length of nearly 140 miles. The addition to the mileage during the year was 68, chiefly on the Chinab system. The season showed an increase of nearly a quarter of a million acres under irrigation from these sources, and the improvement is shared by both perennial and inundational works. Wheat and sugarcane are the crops that show most gratitude for the facilities thus afforded for the extension of their growth. The total return to capital in the case of works constructed from loans was 5·92 per cent., which is within a small fraction the same as was recorded the year before, if the Swat River work be excluded, on the grounds of the specially low local rates levied at present. The Chinab project, which will now become a perennial work, and the Sohag and Para work are the only two that failed to earn the amount of their expenses, including, of course, the interest on the capital outlay. The future of the former is, however, now assured, and the improvement of the latter is under consideration. A portion of the works in the Upper and Eastern Panjab run through the territory of Protected Chiefs. The area irrigated by them rose in 1891–92 from 216,600 acres to 224,450, and the percentage of the return was 2·67 against 1·48. Panjab, 1891–92.

In Sindh the more accurate measurements of the last few years has resulted in a decreased return of the total length of canals, amounting to 76 miles in all. The longer works or systems are by no means invariably those classed as major works. On the contrary, the latter come rather low on the list in that respect. The Haidrabad system returns 492 miles of main canal and 1,138 miles of distributing channels. The Karachi system has 1,112 miles of canal; the Western Nara, 276; and the Shikarpur Works, 272. The Begari Canal, with its three subordinate branches, is allotted 185 miles in the latest return; and the Eastern Nara, the only other work classed as major, has only 175. The work in connection with most of the canals in this province consists in clearance and the protection of the head-works, and prevention of erosion and breaching in case of sudden and early rises of the Indus. In the year 1891-92 the latter feature was disagreeably prominent, and entailed a great deal of extra work and expense. The inundation was, on the whole, a poor and fluctuating one. The effects on the area irrigated, which is in most parts equivalent to the whole area under crops, was remarkable, since the winter crop was the largest on record, but the autumn harvest was the smallest recorded within the last five years. The whole area exceeded the average of that period by nearly 110,000 acres, though it fell short of that of 1890-91 by some 5,440. If the private estates and the small acreage under irrigation from the Desert and Begari Canals to Khelat territory be included, the return will be transformed into an increase of 14,000 acres. Sindh.

The financial results show a deficit in the case of the Desert Canal, and a

IRRIGATION WORKS.

profit of 10¼ per cent. in that of the Begari work. On the whole of the major works the return was 4·53. The minor works showed a profit of 23·8, and the result, on the whole, was 9·94, against 11·78 in the previous year. The inferior inundation affected the autumn crops, which form over 75 per cent. of the total cultivation of Sindh, so that the subsequent winter harvest, good as it was, failed to recoup the canals for the loss in the earlier months.

North West Provinces.

We pass on to the canal systems of the North-West Provinces. Here the fact has to be taken into consideration that even in India with its periodic rainfall, there are tracts, not over-watered by nature, in which irrigation is distinctly harmful to cultivation. In some cases, like that of the disintegrated basaltic soil of the west Deccan of Berar, and of parts of the Central Provinces, the quality of the soil renders the amount of moisture naturally retained sufficient for the winter crop, though it may render the earlier harvest the smaller of the two. Elsewhere, as in the border tract between the North-West Provinces and the Panjab, there are properties in the soil that lead to the appearance on the surface of the saline efflorescence known as "reh," sooner or later, on the introduction of habitual artificial irrigation. In other parts of the former Province, as in the lower Jamna, the natural lines of drainage have been intercepted by the action of canals, so that the soil becomes water-logged, and ceases to be remunerative to the plough. The rainfall, moreover, is notoriously uncertain throughout the western portion of this Province, so that the prospects of the canals, considered financially, are inversely as the season. A plentiful and timely fall during the south-west current, renders the cultivator to a great extent independent of the help afforded by canal water, of which, on the other hand, he is only too eager to avail himself in less fortunate conditions. In this Province, accordingly, some 535 miles of the two larger undertakings have been made available for navigation, in addition to the facilities they may afford for irrigation, but the results are not financially profitable, as the loss was Rx. 534 in 1891-92, and Rx. 904 in the preceding year. The mileage, 1,400, of the major works was not increased during the year 1891-92, though a small addition of 11 miles was made to the 6,169 of distributaries. The area irrigated expanded by some 30,000 acres, chiefly along the Ganges and Agra Canals. The Betwa and the Eastern Jamna showed a falling off. The length of the two Ganges systems, however, 1,029 miles, is far in excess of that of the others in the aggregate, and irrigate nearly one and a-half millions out of the two millions of acres returned. The return on the capital outlay in the case of the Ganges system was 7½ per cent. on the larger section, and 3¼ on the lower branch. The Eastern Jamna, too, contributed nearly 22 per cent. Of the minor works, the Bijnor system equalled it in this respect. The Betwa and Bundelkhand works made no profit. As to the crops grown by means of these canals, it appears that the increase of sugar cane along the larger works was in excess of that of the net increase of cultivation as a whole, and that the area under indigo was the only item that showed a material falling off. Amongst other matters worthy of note during the last year of the decade is the completion of the greater part of the plans for the drainage of the Agra Canal sphere of influence, a subject that has given some anxiety of late years, and which it was hoped would be taken in hand practically in the succeeding year, and thereby tend to the restoration to cultivation of a considerable tract of fair arable land which is temporarily water-logged.

Bengal.

In Bengal there are four major works and six minor. Of the former, one, the Hidgelli, is used for navigation only. The length in operation during 1891–92 was 916 miles, out of which 738 were used for both irrigation and navigation, and 178 for navigation only. In the greater portion of this Province no irrigation by artificial means is required, and in many cases would be harmful to the prevailing crops. But in the dryer tracts, such as South Bihar, the Sone canal system proved very acceptable during the partial drought of 1891–92, and the area irrigated from it increased accordingly from 281,000 acres to 475,700. The areas under the other works showed no marked difference, though the Orissa figures rather fell off. The Midnapore and Sone systems are complete, and that in Orissa is approaching that stage. The gross revenue of the last year quoted was the largest on record, and the net revenue had only been once exceeded. The return to capital outlay was, however, only 0·29 per cent. in the case of irrigation, and 0·25 on the whole. Minor works showed a

rather

rather better result, returning 0·45 per cent., due chiefly to navigation, and, on the whole, the results in this respect are better than in 1890-91 when the return was but 0·13. IRRIGATION WORKS.

The principal works in operation in the Madras Presidency are those connected with the deltas of the three rivers, the Krishna, the Godavari, and the Kavari. An extensive but unremunerative work is also that on the River Tungabhadra, irrigating a portion of the Karnul and Kaddapah districts, well within the zone of uncertain rainfall. There are, however, altogether, 10 major and 20 minor works in the province. Of the works not yet completed, the Periyar project and that of Rushikulia, the former to protect the Madura tract, the latter for the benefit of the Ganjam district, are the most extensive. The former is in the more advanced stage of the two. Over nine miles of canal were opened to the water in the last year under review. The Periyar project is more ambitious in its engineering aspect, and the watershed tunnel and high dam that are amongst its principal features are reported to be making good progress. The area under irrigation increased by some 24,000 acres, though the minor works showed a slight decrease. The short rainfall in the Kistna delta and "ceded districts" was the opportunity for the local canals. The area under the Karnul work increased threefold, and in the sphere of the Kistna canals, considerable areas of dry crop land were given a drenching from the distributaries. But the Sangam and Penner works held an unusually small supply, so that the deficit did much to outweigh the increased areas further north. The financial working of the major works was much the same in its results as in the year 1890-91, with a return of 6·94 on the capital outlay. The minor works show a deficit, instead of the profit of 2·13 per cent. of that year. The length of navigable channels is set down at 1,233 miles. The receipts fell short of the expenditure by some Rx. 10,162, partly owing to heavy work in clearing the Buckingham and Kistna canals. The main use of irrigation in this Presidency is the stimulus thereby given to rice-growing. The local estimate of the value of all the crops irrigated being Rx. 7,180,000, that of rice alone is credited with Rx. 6,720,000. In a previous portion of this review the prevalence in South India of the system of irrigation from lakes, locally known as tanks, was mentioned, and it appears that in pursuance of a general scheme of restoration of these often highly useful works, six parties of investigation were at work during the year 1891–92, with the result up to the end of that period of the preparation of estimates for no less than 3,138 works, scattered over more than 25,100 square miles, with an expenditure already incurred of Rx. 392,200. Madras.

The irrigation works in the sister Presidency are, as a rule, on a much smaller scale. The more important are in the Deccan, where the Nira Canal, including the large reservoir at its head, had received a capital outlay of Rx. 512,775 up to the end of 1891–92, and the Mutha Canals, on which Rx. 630,722 had been spent. The bad season in the south of the Presidency, as in Madras, increased the demand for canal water, and the area irrigated sprang up from 75,000 acres to 96,000. The capacity of the Nira Reservoir (Bhatghar) was considerably increased, and the irrigable area raised from 135,700 to 160,000 acres. In addition to the works that are regularly under the management of the Department of Public Works, there are many old works, mostly of a petty nature, but still of great local use, and yielding a fair revenue, which require professional aid to replace them in their original state of efficiency. This task has been undertaken by the local Government, and as regards the tanks in the South Deccan and Gujarath, repairs or improvements are being undertaken on something of the same plan as in the Madras Presidency, though less systematically, and on a smaller scale. The return on the capital outlay on major works was 1·19 per cent., and on minor ones ·05. Bombay.

The last Province that requires mention here is the small tract of Ajmer-Merwara. Here, as has been already mentioned, the short rainfall for two seasons running nearly exhausted the tanks which feed the few short canals that are used for irrigation. In 1889–90 the acreage was returned as 35,770, and in the next year as 28,500, whereas in the year with which the decade concludes only 12,000 were irrigated or protected. The gross revenue fell off accordingly by 30 per cent., and the net results were a deficit of Rx. 2,173. Ajmer.

ROADS AND BUILDINGS

## ROADS AND BUILDINGS.

Under this head is classed all work undertaken by the Department of Public Works that does not come within the province of either of the two sections dealt with above. The Military Works branch, however, is separately organised at present, as was mentioned in connection with the Army; and of the Civil works carried out, the greater portion consists of road repairs and new buildings. The expenditure on the latter branch of works during the last decade has been as follows:—

| Year. | Expenditure on Civil Works. | | | | In 1891–92. | |
|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | Total. | Province. | Amount. |
| | Rx. | Rx. | Rx. | Rx. | | Rx. |
| 1881-82 | 582,441 | 2,003,130 | 1,391,756 | 3,977,327 | India—General | 221,238 |
| | | | | | Madras | 768,755 |
| 1883-84 | 1,111,645 | 2,125,906 | 1,553,757 | 4,791,308 | Bombay | 681,194 |
| | | | | | Bengal | 900,901 |
| 1885-86 | 444,954 | 1,708,305 | 1,363,097 | 3,516,356 | North-West Provinces | 717,718 |
| 1887-88 | 1,024,912 | 1,732,667 | 1,461,410 | 4,218,989 | Panjab | 475,010 |
| | | | | | Central Provinces | 237,018 |
| 1889-90 | 791,656 | 1,945,626 | 1,536,444 | 4,273,726 | Assam | 191,791 |
| 1890-91 | 721,860 | 2,188,276 | 1,600,095 | 4,510,231 | Burma | 658,469 |
| 1891-92 | 881,358 | 2,461,115 | 1,651,761 | 4,994,234 | England (including exchange). | 142,140 |
| | | | | | Total | 4,994,234 |

In additions to the provision and care of communications, and to the construction of public buildings, this branch of the Administration undertakes the greater number of all works of a public nature, such as those connected with water supply, sanitation, embankments, lighthouses, ferries, and bridges. As a general rule, the Civil department looks after the works that require less professional training or knowledge, and the Public works supplies those qualities in the cases where they are in most need. Local resources, again, are spent, for the most part, on roads, small buildings, and the like, so that the staff under the Board is usually competent to execute the works, but in all cases of greater importance the engineering staff of the State is called in to take up the business. In the annual numbers of this review considerable space has been of late given to a description of the various undertakings of the year. On the present occasion, such a task, for the whole decade, would be both lengthy and superfluous. The special reports from some of the provinces treat of a matter of considerable local importance, namely, the extension of communication by road, but no general comparison can be made of the different parts of India, since the nature of the tract varies so much that what would appear to be a most inadequate provision of made-road in one region amply suffices in another, where either the hard surface allows of good country tracks for all the traffic that passes in the fair season, or else, the water facilities are so great that roads are only wanted to and from the landing places. In the concluding chapter of this review, however, the point is noted in the sections dealing with each province separately, if it be a special feature in the economy of the tract. The cost of the Royal Indian Engineering College, Cooper's-hill, was set down at 28,017*l.* in 1891–92, with about 5,000*l.* more for students' expenses before joining in India. About 35,000*l.* was also debited in the same year to the absentee allowances, &c., of Civil officers employed in the Department of Public Works, and the rest of the Home charges, amounting to some 16,750*l.*, was on account of stores.

## CHAPTER XVII.

## POST OFFICES AND TELEGRAPHS.



THERE are few departments of the administration of India the progress of which has been so steady and continuous as those with which this chapter has to deal, and there are probably none, if we regard the Post Offices alone, in which improvements have been so rapidly and extensively assimilated by the public. In support of this statement, we need only go back a few years, and note the results of the introduction of a system of payment of land revenue by Postal Order, or the payment by the same means of salt duty in Northern India. Then, again, we have the use of Post Offices as centres of distribution of packets of sulphate of quinine, which was mentioned in the chapter on agriculture as having been recently introduced into Bengal, with the result that it is now proposed to extend it to other provinces. Going back a few years further, we find that the system of delivering parcels, recovering the value of the contents from the addressee, and remitting it to the sender, has taken complete hold of the retail dealers in the Presidency towns of Calcutta and Bombay. Finally, we have the introduction of post-cards, of which more anon.

The development of the postal traffic is all the more remarkable when the fact is borne in mind that only about six per cent. of the population are able to read and write. In 1891–92, to take the most recent example, the number of letters, cards, newspapers, &c., delivered by the Post Offices amounted to, roughly speaking, 138 to every hundred of population, excluding those protected States, which are under the British Postal system. The lowest numbers, relatively to that of the inhabitants, are in Bengal and Oudh, where they are 103 and 72 respectively. Assam and the Central Provinces come next, with 111 each. The North-west Provinces show about 114, Madras 158, whilst the highest proportions are in Bombay and Sindh, where, including the States, they are 274 and 266 respectively, and over 410, if the States be omitted from consideration. The relatively large commercial population of Western India is partly no doubt the cause of this prevalence of correspondence, since if it depended upon the relative diffusion of the capability of reading and writing, Madras would be in the van. The Panjab stands high, but its position is to some extent due to the large official correspondence brought into it by the Government of India during the eight months spent at Simla. The progress of correspondence, including postcards and newspapers, that has been made during the last 10 years can best be appreciated from the marginal table, in which the comparison with the population served and the actual and relative increase in the number of letters received for delivery are included. The amount of correspondence has, on the whole, doubled during the decade, and in the three large provinces of Bengal, Madras, and Bombay it has more than doubled. Except in Sindh, the rate of increase nowhere falls below 75 per cent. The population dealt with respectively is that enumerated at both the 1881 and 1891 census, including the States brought under the general postal system. The case of Sindh appears somewhat anomalous, otherwise the figures need no remark.

| PROVINCE. | Total Number of Letters, &c., Received for Delivery. | | Increase per cent. over 1881–82. | Per 100 Inhabitants. | |
|---|---|---|---|---|---|
| | 1881–82. | 1891–92. | | 1881–82. | 1891–92. |
| Madras | 28,733,961 | 62,344,738 | 117 | 84 | 158 |
| Bombay | 31,589,700 | 65,889,521 | 108 | 151 | 274 |
| Sindh | 4,641,208 | 7,977,671 | 72 | 182 | 266 |
| Bengal | 38,429,439 | 77,645,767 | 103 | 55 | 103 |
| North-West Provinces | 20,869,422 | 39,454,944 | 89 | 62 | 114 |
| Oudh | 4,763,509 | 9,202,555 | 93 | 41 | 72 |
| Panjab | 21,965,527 | 38,893,381 | 77 | 96 | 155 |
| Central Provinces | 7,534,734 | 14,399,735 | 91 | 65 | 111 |
| Assam | 3,304,530 | 6,114,992 | 85 | 67 | 111 |
| Burma | 2,553,419 | 13,147,784 | 415 | 68 | 173 |
| TOTAL | 164,385,449 | 335,071,088 | 104 | 76 | 138 |
| TOTAL (omitting Burma) | 161,832,030 | 321,923,304 | 99 | 77 | 136 |

The above figures do not make much of a show, it is true, when placed alongside of those for the United Kingdom, with its 19,000 offices, against

Post Offices and Telegraphs.

8,600 in India, and its 47 letters per head, in the year for which the last Indian figures are above quoted. Still less is the financial result of this great and useful State-undertaking to be compared in the two countries; but, as stated in the beginning of this chapter, the way made in the Dependency within a comparatively short period, and amongst an almost entirely illiterate and rural population, in the face of considerable physical difficulties, and amidst a large number of conflicting interests, such as those of the Protected States, an element not found in the mother country—looking also to the extremely light rates of charge for the convenience,* and the various ramifications, on the most approved system, into which the working of the Department has spread, the progress, we must repeat, is a matter which the Administration is justified in regarding with almost unqualified satisfaction.

It is not out of place to go back a little beyond the actual period to which this review is confined, and to bring forward a few statistics relating to the Post Office operations from their respective inception. In the margin, accordingly, are given the number of the post offices open, and the distance over which mails were carried at various dates since the system was placed on an Imperial footing. The table that follows, however, exhibits more clearly the growth of the postal system. In it each head is considered in relation to the figures for the first year of its complete operation. For instance, the general correspondence and that carried on the State service is taken from 1853-54; but the system of registration was not in full working order until the next year, which, accordingly, is taken as the standard. In the same way, postcards and money orders are compared with the years 1880–81 and 1881–82 respectively, and the value-payable letter system dates from a year later. Finally, a column has been inserted to show the progress of correspondence as a whole since the last year of the preceding decade.

| YEAR. | Number of Post Offices Open. | Total Distance over which Mails were Carried. | Distance by Boat or Runner. |
|---|---|---|---|
| 1854–55 | 645 | 30,594 | 24,467 |
| 1857–58 | 810 | 36,933 | 31,152 |
| 1858–59 | 836 | 39,531 | 33,232 |
| 1861–62 | 942 | 45,554 | 39,034 |
| 1866–67 | 1,738 | 47,929 | 33,976 |
| 1871–72 | 2,954 | 51,858 | 36,149 |
| 1876–77 | 3,352 | 58,370 | 33,422 |
| 1881–82 | 4,819 | 59,677 | 32,321 |
| 1884–85 | 6,488 | 60,888 | 34,482 |
| 1886–87 | 7,097 | 64,055 | 35,729 |
| 1889–90 | 8,103 | 71,113 | 39,189 |
| 1890–91 | 8,395 | 74,882 | 41,476 |
| 1891–92 | 8,617 | 77,728 | 44,019 |

| YEAR. | Total Correspondence for Delivery. | Total Correspondence 1880–81 and 1891–92. | Post-Cards. | Official and Service Correspondence. | Registered Letters. | Value payable. | | Money Orders. | Newspapers. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Letters. | Parcels. | | |
| 1853–54 | 100 | – | – | 100 | – | – | – | – | 100 |
| 1854–55 | – | – | – | – | 100 | – | – | – | – |
| 1857–58 | 217 | – | – | 147 | 139 | – | – | – | 288 |
| 1858–59 | 265 | – | – | 173 | 220 | – | – | – | 346 |
| 1861–62 | 245 | – | – | 177 | 265 | – | – | – | 231 |
| 1864–65 | 296 | – | – | 191 | 409 | – | – | – | 269 |
| 1867–68 | 362 | – | – | 78 | 565 | – | – | – | 296 |
| 1871–72 | 467 | – | – | 81 | 754 | – | – | – | 374 |
| 1874–75 | 604 | – | – | 146 | 1,090 | – | – | – | 513 |
| 1877–78 | 667 | – | – | 69 | 1,226 | – | – | – | 602 |
| 1878–79 | 687 | – | – | 75 | 1,270 | – | – | – | 563 |
| 1879–80 | 745 | – | – | 84 | 1,349 | – | – | – | 616 |
| 1880–81 | – | 100 | 100 | – | – | – | – | – | – |
| 1881–82 | 887 | 108 | 148 | 91 | 1,410 | – | 100 | 100 | 686 |
| 1883–84 | 1,040 | 126 | 260 | 97 | 1,599 | 100 | 182 | 141 | 868 |
| 1885–86 | 1,228 | 153 | 396 | 103 | 1,809 | 240 | 246 | 193 | 1,114 |
| 1886–87 | 1,383 | 173 | 512 | 111 | 2,097 | 452 | 313 | 255 | 1,196 |
| 1889–90 | 1,572 | 197 | 635 | 128 | 2,432 | 809 | 428 | 313 | 1,275 |
| 1891–92 | 1,742 | 219 | 758 | 139 | 2,719 | 1,141 | 507 | 361 | 1,419 |

* *e.g.*, post card travels 4,000 miles for less than a farthing.

Post Offices and Telegraphs.

General correspondence.

The figures need but little explanation. The correspondence doubled in the first five years of the working of the system. It doubled again between the Mutiny and the year 1871–72, and has almost doubled in each of the succeeding decades. In the last 10 years the rate of progress has been even higher. The development of the newspaper circulation by post has been equally worthy of note, though the relative increase is not so great as in the case of correspondence. In the last 10 years, too, the rate lagged a bit. A more remarkable rate is found in the case of registered letters, a form of communication that has special attractions for the more suspicious of those who use the post for the purpose of communicating with the local officials or in important family affairs. Post-cards, on the whole, have been the most successful in securing a rapid popularity. The cost of each is but 0·016 rupees, and so far as the bulk of the correspondence of the masses is concerned, privacy is not considered necessary. The value payable system of parcel and letter post is used chiefly between the large towns, especially Bombay and Calcutta, and the interior of the country. It is a curious feature in these transactions that nearly half the business of the year is done with Bengal, and nearly all of this again is traced to Calcutta. In Madras, the excess of receipts over posted parcels shows that most of the transactions are with either Calcutta or Bombay. The system was slower than usual in "catching on," probably owing to the novelty proving attractive only to European residents, and in the first full year of working the number of articles thus sent was only 7,408. In 1879–80, however, the second year of trial, the number was nearly quadrupled, and in 1891–92 it had risen to over a million and a quarter. The value recovered by the postal officials, in respect of these deliveries, again, is a good test of the popularity of the system and the trust reposed in it by what must be a very extended clientèle. In 1878–79 this value was only Rx. 13,211; 10 years later it had risen to Rx. 926,798; and in the last year under consideration it was Rx. 1,345,029.

Money Orders.

The next branch which will repay notice is that of the Money Orders. The system came into action in 1879–80, but only for the last quarter of that year. The second year of the operation has been accordingly used as the basis of comparison. Since that date the number of transactions has risen by 260 per cent. In the first instance, the number was 1,604,174, and in the last nearly 7,800,000. The value, again, as in the case of the value-payable system, is of interest, but from a different standpoint. In the former, the rise per transaction implies increased confidence amongst the well-to-do correspondents. In the case of money orders, the most satisfactory evidence of the fulfilment of the object of the system is the gradual decline in the rate per transaction along with the very large general expansion of the number. It is a matter for congratulation, therefore, that this result has apparently been attained, for the incidence is falling, and a special investigation made in 1889 and 1891–92 shows that in the former years 31¼ per cent., and in the latter 32 per cent. of the orders were for sums not exceeding five rupees; that 60 per cent. at the last inquiry were below 10 rupees, and that 92 per cent. were for less than 50 rupees. Thus it is clear that the work is confined to its legitimate sphere, that is, the remittance of small sums. There are curious local differences in the extent to which this method of remittance is adopted. For instance, in the last year under review, Bengal is credited with over a third of the total business, and Calcutta with a quarter of it. A good deal of this is due, no doubt, to the extensive use of the value-payable letter system by the local tradesmen. Amongst recent extensions of the money order system may be mentioned that by which the payment of land revenue may be made by this means. This system is now in force throughout the North-West Provinces and Bengal, and has been introduced, experimentally, into certain portions of the Panjab and Central Provinces. The plan of thus paying in the dues on account of revenue is no doubt being widely adopted, and Rx. 281,083 was thus paid in the North-West, and Rx. 143,977 in Bengal, but there are factors in the case, into which it is not necessary to enter here as they are connected with the land tenure of the tracts in question, which render it by no means certain that the system is not without its disadvantages. Amongst the issues of money orders may be mentioned those by telegraph, which have been rapidly increasing of late. More than half are between Burma and Madras, and it is curious that a rather expen-

Post Offices and Telegraphs.

sive method of remittance should be so popular with the immigrant of the former province. The analysis of the Returns shows, however, that such is the case, as the average per order is far above that usual in the case of ordinary popular remittances. There are, on the other hand, numbers of cases in which the amount of the remittance is so small that it is clear that the use of the telegram was stimulated by the appreciation of its speed, as compared with that of the post. Foreign money orders are far more rare than the above. In 1891-92 the number paid was no more than 21,000, and the amount in sterling 136,500*l.*, and the issues were 12½ per cent. in number and 20 per cent. in value below those of the preceding year.

Miscellaneous Departments of postal services.

There are sundry ways in which the instrumentality of the Post Offices has been utilised for various purposes during the decade, some of which may well be mentioned in this review. In the Panjab, for instance, military pensioners are paid through them, and a scheme is being matured under which they may be trained for employment in the department on the conclusion of their term of service in the Army. Salt revenue, again, is received in Northern India through the post offices, so that small dealers can pay in what they owe for their purchases from the depôts at the office most convenient to their place of business. No less than Rx. 850,000 was thus received during 1891-92, the second year of the adoption of the system. But as the system appears likely to lead to the transfer of the duty of receiving such revenue from the departmental channels to the postal officials, it has since been arranged that the latter shall only act in places where there is neither a treasury or sub-treasury, and on payment of a small commission, as in the case of money orders.

Unpaid and registered letters, postcards, &c.

A few points in regard to the more legitimate business of the postal department may now be briefly noticed. The number of unpaid letters, for instance, appears to have remained fairly constant for the last ten years, in spite of the great increase in the number of letters, &c. posted. The greatest offenders in this respect are the inhabitants of Oudh, Assam and Burma. Post cards, the popularity of which was mentioned above, rose in the last year of the decade by 11½ per cent., and only Sindh and Burma seem to hold back from this cheap mode of communication. As to registered letters, it is remarkable that the Madras Presidency returns a quarter of the total number, and the prevalence of this means of transmitting valuables is attributed to the absence in the south of India of the system of "hundi" or bills of exchange, which are such a feature of the commercial system further north and west. In the report for 1891-92 a noteworthy instance of the regard of the native population for the postal administration is cited in connection with the parcel system. It appears that a pious Brahman wrote to suggest the adoption of a general plan for the conveyance of the ashes of dead Hindus to the borders of the Ganges, with the assurance of their delivery to the sacred river by Brahman postmen, in which case a vast traffic would, he said, be ensured.

Foreign correspondence.

The foreign correspondence necessarily forms a considerable item in the year's transactions. The mails to Europe are conveyed by contract with a private firm, under subsidy paid in England. The rate of postage on letters and cards was reduced from the year 1891-92, with the result of an increase of half a million in that class of correspondence. It may be remarked, by the way, that the increase, though well developed in both directions, was more prominent in the receipts from, than in the deliveries for, the United Kingdom. The former increased by over 10 per cent. in the lighter traffic, and by 16½ in the case of books, under the reduced rates, whilst the latter increased by 7½ and 13 respectively.

Administration.

The administration of the Imperial postal arrangements in India is placed in the hands of a Director General, and the whole country is mapped out into circles, corresponding, for the most part, with the territorial limits of the Provinces. In the case of Bengal, however, with its enormous population, Bihar and the Eastern division have been constituted separate charges, though under the Postmaster General of the Province as a whole. Sindh, again, is especially supervised, and not included under Bombay, except in general administration. But in addition to the Imperial Post, a good deal of work is entrusted to what is known as the District Postal staff. This is either paid for

for out of a special local cess, or from a grant by the Provincial Government. In 1891-92, and considering the rapid development of the post it is not necessary to go farther back, there were 1,146 district offices of this class, and 2,721 postmen, serving routes aggregating 33,400 miles in length. The articles received for delivery by this agency numbered in that year nearly 13 millions, whilst over eight millions were posted in the above offices for delivery by the Imperial department. The primary object of the district establishment is to provide communication between the district head-quarters and the stations in the interior of that administrative unit, whether revenue or police, and it is to this that it is proposed to restrict it, leaving the rural delivery, to which some of its energy has of late been diverted, to the care of the Imperial staff. To help in this object, the plan has been successfully adopted in some provinces of placing small offices in villages under the local schoolmaster, to whom an allowance is made for his attention to the duties connected with it. Post Offices and Telegraphs.

The Postal Department was called upon several times in the last 10 years to provide for communication with the various forces on the frontier expeditions which have been mentioned in the chapter on the Army. It is not necessary to enter here into the details of the good work done by the establishments thus despatched. Nor, again, is there more to be added regarding the Post Office Savings Banks, which have been treated of under the head of Finance, beyond stating that during the last year under review the depositors increased by 13½ in number, whilst their deposits expanded by over Rx. 712,500. As has been before pointed out, the decreasing rate of account shows that the system is growing in popularity. Judged by this standard, Madras comes first, with Rx. 9, and Bombay and Sindh are at the other end of the scale, with Rx. 21. As to race, about 89 per cent. are natives of India. The classification as to occupation leaves a good deal to surmise, since out of the 463,450 accounts, no less than 175,800 are not classed. Of the rest, 166,000 are set down as professionals, and only 6,660 as agricultural. Field services. Savings Banks.

The last topic with which this section has to deal is that of the finances of the Postal Department. The marginal table gives the relative increase of both sides of the account, according to the Director General's statements, since the organisation of the general system. It appears that the expenses have not grown concurrently with the receipts, and, if official postage be taken into the account, there has been an annual surplus varying from Rx. 350,700 in 1864–65 to Rx. 1,018 in the year of the Mutiny. But this only refers to the transactions of the Department in India. If the official postage be omitted from the receipts, and the charges paid in England, with the exchange on them, be included, the complexion of the statement is sorely changed for the worse. The deficit now amounts to a sum varying from Rx. 296,500 in 1870–71 to Rx. 9,243 in 1890-91. Even excluding official postage in India, the last four years have shown a surplus, which on one occasion would have covered the English claim, were it not for exchange, and in three out of the four would have well covered the exchange alone. The accounts embodied in the Financial Statement of the Government of India differ somewhat from those of the Director General in their arrangement. It is as well, therefore, to show both for the last two years. In the departmental account the non-postal services are distinguished from the legitimate work. The discount allowed on the sale of postage stamps, also, is not taken into either the receipts or sales, but the net amount received is entered. Finance.

| Year. | Receipts from the Public. | Expenditure in India. |
|---|---|---|
| 1853-54 - - | 100 | 100 |
| 1861-62 - - | 137 | 156 |
| 1871-72 - - | 212 | 209 |
| 1881-82 - - | 357 | 327 |
| 1891-92 - - | 585 | 466 |

Post Offices and Telegraphs.

## A.—From the Departmental Accounts.

| RECEIPTS. HEAD. | 1891-92. | 1890-91. |
|---|---|---|
| | Rx. | Rx. |
| Postage, including Commission | 366,017 | 353,433 |
| Net Sale of Stamps, ordinary | 819,539 | 800,871 |
| " " Service | 213,351 | 203,544 |
| Due by London Post Office for Steam Service | 15,359 | 24,516 |
| Payments by Colonial and Foreign Administration | 1,066 | 1,115 |
| Miscellaneous | 8,662 | 7,579 |
| *Deduct*,—Due to London Post Office | *17,833* | *40,689* |
| Due to Foreign Colonial Administration | *6,341* | *781* |
| NET TOTAL POSTAL | 1,399,820 | 1,349,588 |
| *Non-Postal.* | | |
| Bullock Train | 7,133 | 11,283 |
| Passenger Service | 17,117 | 21,746 |
| Contributions from States | 1,124 | 1,121 |
| TOTAL NON-POSTAL | 25,374 | 34,150 |
| GRAND TOTAL* | 1,425,194 | 1,383,738 |

| CHARGES. HEAD. | 1891-92. | 1890-91. |
|---|---|---|
| | Rx. | Rx. |
| Fixed Establishment | 816,949 | 777,748 |
| Miscellaneous and Contingent | 245,755 | 232,006 |
| Stationery and Printing | 51,082 | 6,424 |
| Mail Cart | 19,010 | 23,883 |
| Bounty Money | 993 | 877 |
| Construction and repair of buildings | 2,267 | 2,485 |
| TOTAL POSTAL | 1,136,056 | 1,063,423 |
| *Non-Postal.* | | |
| Bullock Train | 13,552 | 15,251 |
| Passenger Service | 17,117 | 21,746 |
| Subsidies | 61,911 | 64,628 |
| TOTAL NON-POSTAL | 92,580 | 101,625 |
| GRAND TOTAL* | 1,228,636 | 1,165,048 |

* Excluding discount on sales of stamps from both sides of the Account.

## B.—From the Financial Statements.

| RECEIPTS. HEAD. | 1891-92. | 1890-91. |
|---|---|---|
| | Rx. | Rx. |
| Postage on private correspondence | 154,814 | 156,000 |
| Sale of ordinary Stamps | 833,011 | 814,335 |
| Sale of Service Stamps | 213,162 | 203,523 |
| Mail Cart Service, &c. | 17,117 | 21,747 |
| Money Order Commission | 211,210 | 196,717 |
| British Postal Order " | 185 | 130 |
| Fees and Petty Receipts | 8,791 | 7,872 |
| Protected States' Contribution | 1,124 | 1,121 |
| Bullock Train Receipts | 7,137 | 11,283 |
| *Deductions* | *7,962* | *16,587* |
| District Post Receipts | 7,766 | 6,362 |
| GRAND TOTAL | 1,446,355 | 1,402,503 |

| CHARGES. HEAD. | 1891-92. | 1890-91. |
|---|---|---|
| | Rx. | Rx. |
| Direction | 14,724 | 13,916 |
| Accounts | 41,178 | 35,580 |
| Provincial Establishments | 786,832 | 767,678 |
| Conveyance of Mails | 260,375 | 261,421 |
| Subsidies | 61,911 | 64,628 |
| Discount on Sales of Stamps | 12,965 | 12,647 |
| Stationery, &c. | 55,223 | — |
| Miscellaneous | 5,334 | 22,033 |
| District Post Charges | 116,667 | 114,328 |
| Stores from England | £. 35,964 | 33,799 |
| Payments in " | £. 60,357 | 44,975 |
| Exchange | 41,829 | 25,739 |
| GRAND TOTAL | 1,493,359 | 1,396,744 |

## TELEGRAPHS.

Telegraphs.

With the exception of a few miles of provincial line in Bombay, the whole of the telegraphs in India form an Imperial charge administered, as in the case of the Postal Service, through a Director General. For the present purpose, the service may be considered under two heads, the Inland and the Foreign. The former has been since 1877–78 distributed into 17 circles. As it is necessary for obvious reasons that the whole system should be under Imperial control, the department over which the Director General presides has the charge of the lines that run along the railways, though they are used jointly for railway purposes and for general traffic. In 1891–92, the number of miles of line is returned as 38,625·3, in addition to 252·6 miles of cable, chiefly in Eastern Bengal, Assam, and Burma. The mileage of wire is set down as 120,159 maintained under the Director General, and 6,880 not maintained by the State; of the latter 4,144 miles are the property of the great Indian Peninsula line, 2,548 of the Madras Railway, and 256 of the West of India Portuguese line, whilst the small remainder is rented by the State to a line in Madras. Of the former section, 74,962 miles are reserved for departmental traffic, and the bulk of the rest is rented to railways.

Telephones and private stations.

In supplement of the telegraph lines, a beginning has been made in India with the extension of telephonic communication in some of the larger seaport towns. The introduction of improved apparatus, combined with cheaper rates, seemed to have helped to promote this enterprise somewhat during the last year or so, but as the following figures will show, the progress, though fairly fast, is not wide. In 1882, the companies had 241 subscribers, and at the end of the decade, 1,076, with 1,186 connections. The private departmental lines rose from 5 to 139 in the same period, and the gross rental from Rx. 7,300 to Rx. 23,040. Between the close of the calendar year 1891, however, and that of the financial year, there was the important addition of 161 miles of private line between Calcutta and Goalando to the works connected with the department, which are not included in the above. They now count 260 line-offices thus connected, with Rx. 6,462 subscriptions. Arrangements are in progress to connect police stations in this way in five large towns of the North-West Provinces.

Extension.

The general progress of the State telegraph system can be easily appreciated from the following table, taken from the Revenue and Financial Accounts of the Government of India.

GENERAL STATEMENT of Indian Telegraphs, from Finance and Revenue Accounts.

| YEAR. | Miles of Line open. | Signalling Offices. | Messages. | | Receipts. | Working Expenses. | Capital Outlay up to end of each year. | Per Mile of Line. | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Number. | Charge. | | | | Revenue. | Charges. |
| | | | | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1851-52 - - - | 83 | 6 | - | 600 | 600 | 538 | 6,219 | 7·22 | 6·48 |
| 1857-58 - - - | 6,033 | 82 | - | 37,719 | 37,742 | 55,724 | 450,118 | 6·59 | 9·73 |
| 1858-59 - - - | 9,401 | 122 | - | 54,008 | 54,105 | 95,543 | 564,288 | 5·95 | 10·5 |
| 1861-62 - - - | 11,401 | 144 | - | 67,442 | 67,948 | 142,498 | 763,299 | 6·12 | 12·84 |
| 1865-66 - - - | 13,767 | 172 | - | 112,666 | 114,542 | 163,392 | 1,413,880 | 8·55 | 12·2 |
| 1869-70 - - - | 13,793 | 198 | 510,944 | 116,647 | 122,976 | 273,056 | 2,296,726 | 8·91 | 19·8 |
| 1871-72 - - - | 14,857 | 199 | 628,192 | 154,334 | 156,633 | 228,281 | 2,552,998 | 10·54 | 15·36 |
| 1875-76 - - - | 16,633 | 226 | 866,052 | 212,384 | 231,482 | 272,407 | 3,075,753 | 13·91 | 16·37 |
| 1879-80 - - - | 20,520 | 276 | 1,571,254 | 386,250 | 425,145 | 290,999 | 2,466,072† | 20·71 | 14·18 |
| 1881-82 - - - | 21,049 | 292 | 1,616,106 | 325,648 | 385,421 | 323,564 | 2,736,538 | 18·31 | 15·37 |
| 1883-84 - - - | 23,572 | 364 | 1,826,688 | 324,227 | 412,778 | 375,796 | 3,197,106 | 17·51 | 15·94 |
| 1885-86 - - - | 27,510 | 634 | 2,292,842 | 399,297 | 511,472 | 362,545 | 3,836,841 | 18·59 | 13·18 |
| 1887-88 - - - | 31,894 | 745 | 2,809,803 | 520,757 | 663,371 | 429,732 | 4,501,091 | 20·08 | 13·4 |
| 1889-90 - - - | 35,279 | 880 | 3,135,035 | 507,171 | 663,504 | 454,094 | 4,832,552 | 18·80 | 12·87 |
| 1891-92 - - - | 38,625 | 1,001 | 3,811,559 | 573,254 | 743,425 | 483,814 | 5,223,618 | 19·25 | 12·53 |

* Excluding interest on capital outlay.

† The difference is consequent on the revision of the Capital Account.

TELEGRAPHS.

It will be seen that the Department began systematic work a year or two in advance of the Imperial Postal system. For several years the charges largely exceed the revenue, but from about 1876–77 the former, excluding the interest on the capital outlay, effected the desired change of position. The charges per mile worked grew less and less, whilst the receipts proportionately increased. For the last seven years the Return shows an excess of revenue over expenses and interest varying between Rx. 1,126 in 1885-86 to Rx. 59,000 in 1887-88, and Rx. 54,300 in the last year under review.

Inland traffic.

The best test of the working of the telegraph in the popular estimation is the growth of inland private messages. The marginal table gives this in a proportional form, using the year 1880-81 as the basis of comparison. The figures speak for themselves. It appears, too, that the average cost per message is decreasing. The means of comparison are only available from the year 1869–70, but whereas the cost of a message twenty years ago averaged Rs. 0.25, ten years later it had fallen to Rs. 0.20, and at the end of the period with which this review is concerned, the incidence was reduced to Rs. 0.15. Press messages, it is worth mentioning, advanced 63 per cent. within the last five years of the decade, the rate of progress being identical in the case of both Indian and foreign. Of the 1,096 signalling offices open either permanently, or for a time only, during the last few years, the majority sent between 1,000 and 5,000 messages per annum, and 140 only exceeded the latter number. The numerous military expeditions demand from time to time the organisation of field telegraphic arrangements. In 1891-92, for instance, 470 miles of wire were thus laid in connection with the Wuntho, Miranzai, Hazara, and north-east frontier expeditions. The year just mentioned, too, completes the decade during which the present inland tariff has been in force; and the fact that the number of private messages has more than doubled, whilst the value has advanced in very nearly, though not, as stated above, in quite the same proportion, speaks well for the equity of the rates. These rates, it has been mentioned in preceding reviews, are fixed in relation to the expedition specified as being required for delivery of the message. The most expensive is the "urgent" class, which covers a special delivery. The "ordinary" is sent out periodically during the day of receipt, whilst the "deferred" need not be delivered till the following morning, though, as a matter of fact, there is often little difference made, except in the Presidency, and other large towns, between the two last classes. The rates are, for the first, Rs. 0.25 per word; for the second, half that amount; and for the last, a quarter, each with its respective minimum charge.

| Year. | Variation. |
|---|---|
| 1880–81 | 100 |
| 1881–82 | 89 |
| 1882–83 | 114 |
| 1883–84 | 118 |
| 1884–85 | 131 |
| 1885–86 | 146 |
| 1886–87 | 161 |
| 1887–88 | 178 |
| 1888–89 | 203 |
| 1889–90 | 210 |
| 1890–91 | 226 |
| 1891–92 | 252 |

Foreign traffic.

We now pass on to the foreign traffic. The abortive attempt on the part of the late Red Sea and India Telegraph Company to justify their title is still commemorated in the accounts of the Department in the form of an annual payment of Rx. 18,027, to which exchange now adds another sum of Rx. 7,828, on account of half the annuities to the shareholders of the Company. The cable was laid in 1859, and ceased working within a few days of its completion. In 1864 a State line was laid between Karachi and Fao, at the head of the Persian Gulf, and continued to Baghdad, and the year after, to provide against the inconvenience of interruptions, an alternative line was passed through Persia, by Bushir and Teheran, back to Baghdad. In 1870 a submarine cable was laid by the Eastern Telegraph Company between Bombay and Suez, whilst the Indo-European Company opened through communication between Germany and Teheran. There is now a duplicate cable to Suez, and the extension of the line to the far east has opened out the route by Northern Asia. To prevent competition and to ensure co-operation in this important enterprise, the Government of India and the two companies work on what is called the "joint purse" plan, under which the aggregate receipts are shared proportionately to the work done. The annual report of the Director General contains a statement of the distribution of the foreign traffic between the three routes, Suez and the two

two under the Indo-European. The general results are as shown marginally. TELEGRAPHS.

| Year. | From India. | | | | To India. | | | |
|---|---|---|---|---|---|---|---|---|
| | Suez. | Teheran. | Turkey. | TOTAL. | Suez. | Teheran. | Turkey. | TOTAL. |
| 1871-72 - - - | 24·5 | 13·4 | 12·8 | 50·7 | 28·3 | 15·7 | 5·3 | 49·3 |
| 1874-75 - - - | 26·4 | 24·8 | 0·9 | 52·1 | 24·1 | 23·1 | 0·7 | 47·9 |
| 1877-78 - - - | 40·1 | 9·6 | 2·1 | 51·8 | 39·0 | 8·2 | 1·0 | 48·2 |
| 1881-82 - - - | 36·0 | 16·2 | 0·6 | 52·8 | 30·9 | 15·4 | 0·9 | 47·2 |
| 1884-85 - - - | 25·8 | 26·1 | 0.7 | 52·6 | 29·7 | 16·9 | 0·8 | 47·4 |
| 1887-88 - - | 32·3 | 20·9 | 0·6 | 53·8 | 31·8 | 13·6 | 0·9 | 46·2 |
| 1889-90 - - - | 27·3 | 25·7 | 0·8 | 53·8 | 26·8 | 18·0 | 1·4 | 46·2 |
| 1890-91 - - - | 26·0 | 27·3 | 0·8 | 54·1 | 25·4 | 19·4 | 1·1 | 45·9 |
| 1891-92 - - - | 25·4 | 27·6 | 1·0 | 54·0 | 26·3 | 18·5 | 1·2 | 46·0 |
| Average, 21 years | 30·1 | 21·2 | 1·6 | 52·9 | 29·2 | 16·6 | 1·3 | 47·1 |

The Suez route predominates in the return on both outward and homeward traffic. The Turkey route is but little favoured in either direction, and gets less than 3 per cent. of the messages, against 59⅓ of Suez and 37·8 taken by Teheran. Of the traffic with the far east, which is not shown in the above return, as it is only passed across the Indian lines, 88 per cent. came by the Suez route. The interruptions of communication between India and China were only complete on one occasion in 1891-92, when both the cable and the land line by Siam were simultaneously affected, and the messages had to be sent accordingly round by the Amur route. There are two lines to Siam, only one of which is in working order. As to the lines to the west, it appears that the Turkish route has been interrupted, on an average for 56 days every year since 1887–88. The Persian section once stopped for five hours in the year 1891–92, and on the Indo-European lines during the same period the total interruptions amounted to three days and a fraction. The traffic increased from 2,012,600 words in 1881–82 to 2,347,250 in the last year now under consideration. Owing to alterations in tariff and other causes, the value remained almost constant. The mean rate of transmission between London and Karachi was, in 1887–88, 55 minutes by Teheran and 15 hours 54 minutes by Turkey. In 1891–92 the corresponding figures were 59 minutes by the one and 16 hours 12 minutes by the other.

The capital account of the Indo-European line up to the end of March 1892 shows an outlay of Rx. 1,151,509. The revenue account for that year shows a balance of receipts amounting to Rx 16,203. The net traffic earning increased considerably, but the re-insulation of the Persian line entailed a good deal of extra expense. The return on the capital outlay was set down in 1887–88 as 1·75, but it fell in 1889–90 and the following year, when the cables were renewed, and recovered in the last year of the decade to 1·40. The number of State and private messages conveyed has been increasing of late. As to press messages, it is curious that those connected with the "Times," which are carried at special rates, have gone up and down during the last five years inversely as those for other newspapers. The figures hitherto dealt with, except those in the first table given, have been taken from the Departmental statements. In accordance with the procedure adopted in former chapters, therefore, a summary of the results of the last year of the decade are now added as they appear in the Government of India's annual statement. Both sections paid their way, but the foreign traffic has its surplus reduced by the amount due to the annuitants of the now defunct Red Sea Company. Finance.

TELEGRAPHS.

RECEIPTS.

| HEAD. | Revenue. |
|---|---|
| | Rx. |
| A.—INDIAN IMPERIAL TELEGRAPHS : | |
| Messages | 570,118 |
| Rent from Railways, &c. | 147,994 |
| Rent from local and private lines | 10,628 |
| Royalty from Telephone Companies | 1.159 |
| Recoveries from guarantees | 4,454 |
| Miscellaneous and Provincial | 3,147 |
| TOTAL A. | 737,500 |
| B.—INDO-EUROPEAN TELEGRAPHS : | |
| Messages | 165,006 |
| Joint Purse | *34,229* |
| Miscellaneous | 999 |
| Payments in England taken in reduction of receipts, including exchange | 50,059 |
| TOTAL B. | 181,835 |
| GRAND TOTAL | 919,335 |

CHARGES.

| HEAD. | Capital. | Revenue. |
|---|---|---|
| | Rx. | Rx. |
| A.—INDIAN TELEGRAPHS : | | |
| Capital charges | 188,552 | — |
| *Deduct* receipts on Capital Account | 1,574 | — |
| TOTAL CAPITAL | 186,985 | — |
| Revenue charges | — | 468,808 |
| Provincial charges | — | 385 |
| TOTAL REVENUE | — | 469,193 |
| B.—INDO-EUROPEAN TELEGRAPHS : | | |
| Capital, Persian Gulf | 889 | — |
| „ Persia | 7,296 | — |
| TOTAL CAPITAL | 8,185 | — |
| Revenue charges, Persian Gulf | — | 63,877 |
| „ „ Persia | — | 34,566 |
| TOTAL REVENUE | — | 98,443 |
| Payments in England taken in reduction of receipts | — | 50,059 |
| TOTAL B. | 8,185 | 148,502 |
| Annuities to shareholders of the late Red Sea, &c. Company | — | 25,855 |
| GRAND TOTAL (Rx. 838,720) | 195,170 | 643,550 |

# CHAPTER XVIII.

## SURVEYS.

Surveys.

The extensive and varied operations carried out in connection with the Survey of India in its different branches have been adequately treated in two special works on the subject by Messrs. Markham and Black; but a review of the general administration of the country would be incomplete without some mention of the valuable scientific and administratively important work of the decade that comes under this head, whether it be done by sea or by land, within the Indian frontier or beyond it. The main heads, accordingly, under which the subject will be considered in the following sketch are: (*a*) the marine survey; (*b*) the tidal and levelling observations; (*c*) the geographical survey; (*d*) the trigonometrical, topographical and cadastral operations; (*e*) geographical observations and exploration; and (*f*) the archæological survey.

### A.—Marine Survey.

Survey observations along the coast of India had been duly made and recorded by officers of the Indian Navy up to the time of its abolition in 1862. From that year until 1875 nothing of the kind was undertaken. Then a small establishment under Commander Taylor, an officer of the late Indian Navy, started work off Burma in 1876-77. The ports of Karwar and Marmagao on the west coast, and False Point and the Madras roadstead on the east, were also examined and partly surveyed. Next year saw a more extended tour of inspection, and the whole of the Peninsula was circumnavigated, and two years later the light-houses and vessels came under investigation. A special survey steamer was provided in 1881. Meanwhile, a committee on the working of the whole department made proposals for reorganisation on lines which did not altogether commend themselves to the Admiralty, and, on a further examination of the questions raised by the newly-appointed Director of Indian Marine, it was decided to place the Survey on an entirely new footing. In 1882, accordingly, a surveyor was appointed, with a maximum establishment of seven officers of the Royal Navy and nine assistants of the Indian Marine. A programme of operations was drawn up by the surveyor for all survey work, and for connecting it with the great trigonometrical operations. The headquarters were moved to Bombay, and work has since been steadily carried on all round the coast and up the Irawadi, the Chittagong estuary, the Quilon backwater, and the Megna rivers. A good deal of useful information as to marine zoology was also collected by the surgeon accompanying the chief expeditions, who superintended deep-sea dredging operations. By 1888-89, out of a total coast-line of 5,100 miles, 1,715, or one-third, had been charted sufficiently for safe navigation. Progress has since been made in the directions then suggested by the officer in charge, but many years will probably elapse, at the rate of work that is possible to the present scale of establishment, before the whole coast has been adequately surveyed.

### B.—Tidal and Levelling Observations.

This is a specially technical branch of the Survey operations, based originally on systematic record of tidal variation from 1877 downwards. The tidal operations consist, roughly speaking, of the establishment, supervision, and inspection of automatic instruments for the registration of heights of tide, of barometric pressure, and the direction and velocity of winds. A trained observer is posted to the charge of each set of instruments, his tabulated record is sent daily to the headquarters of this branch of the Survey, at Poona, and there the necessary

Surveys.

reductions and corrections are computed. The number of stations has been as high as 31, of which 19 were closed during the decade, as their registration was completed, and 12 are still in operation. The constituents of the Indian tides are worked out by formulæ devised by Professor Darwin, in supersession of those suggested by the Tidal Committee of the British Association, which were first adopted. A single but effective machine for working out tide predictions was prepared for the survey to include 24 tidal constituents, so that the curves for a year are run off mechanically in a few hours, the results being accurate and found to entirely fulfil their object. It may be mentioned that in 1887 the *datum* for each of the observing stations was fixed on a new and more correct principle than the former "mean low water for ordinary spring-tides" adopted by the Admiralty for soundings. It is superfluous to reproduce the details of the calculation. Amongst other interesting results of the tidal observations of a less technical character than the bulk of the work may be mentioned the phenomena attending upon the great eruption of Krakatoa at the end of August 1883, which were felt as far off as Aden, 4,000 miles from their centre. The most prominent result was the formation first of a negative wave, or marked sinking in the sea-level, followed by a vast positive wave at intervals, decreasing as the distance from Krakatoa was greater. It is also curious that *supertidal* wavelets preceded the eruption in increased intensity, and perceptible three hours before the great explosion, even at the most distant stations, whilst large waves succeeding the eruption were necessarily registered throughout the area of observation.

In connection with the levelling operations, the tidal stations at Madras and Bombay were connected by a series of observations carried across the Peninsula, as near the railway as possible. The results showed a difference of nearly three feet in favour of the sea level at Madras, due possibly to the local attraction of the Ghat range of mountains, and the length of elevated table land over which the line was carried, or, probably, to the accumulation of minute errors, which would not have occurred had the line been taken along the coast. Another disturbing element in the sea-level was found about the mouth of the greater estuaries, where the riverain influences affect the tide-tables to a considerable extent. A difference, again, that appears to be real, and not due to accidental or temporary causes, was found in the mean sea-level at Madras, as ascertained at the present survey, and that recorded at the same place 60 years previously, indicating a fall of nearly a foot. In 1882–83 a line of levels was completed, 2,300 miles long, from Karachi to False Point, on the Bay of Bengal, with an error of less than 9 inches per 1,000 miles, thus giving accurate sea-level throughout a tract where this *datum* had been previously unknown. Another long line of the same nature was carried in the oblique direction from a point on the above line to one in the North-West Deccan, on the Great India Peninsula Railway, with an error of less than four inches per 1,000 miles.

## G.—Geological Survey.

The record of the geological investigations that have been from time to time conducted in India are found in the Departmental Memoirs and Records, and in the Palæontologica Indica a description is given of the organic remains discovered in the course of survey. Geologically speaking, India, south of the Himalayas, presents an interesting variety, from the alluvial plain, through basalt, coal, and metamorphic rock, to a formation peculiar to the central belt of hills known as the Vindhya range, which has hitherto yielded no fossils, and which, therefore, like other isolated specimens, cannot at present have a date or period assigned to it. Geological inquiry was systematised and placed under one head in 1856, previous to which valuable work had been done by individual investigators, but no general examination of the features of the country as a whole had been undertaken. A large area was examined and reported on during the first 20 years of the new Department, and since 1876 special attention has been directed to certain formations, such as the coal beds of Central India, known as the Gondwana series, and the continuation of the Vindhya system to the south-east. Sindh, Kashmer and Western Thibet were added to the surveyed area, and fresh ground was also broken in the extreme south of India.

The

The Salt range, too, mentioned in the last chapter, was thoroughly explored. In 1882 the Umaria coal beds of Gondwana, which had been known, indeed, but not appreciated, were tested and found valuable, not only for the sake of the good supply of the fuel itself, but owing to the proximity of first-class iron ore near Katni, a station on the East India Railway, and now a junction with the Bengal-Nágpur line. This ore, however, has not yet been worked, as the low price of the imported product prevents competition. A year or two later, the central chain of the Himalaya and the mountains and valleys of Upper Assam were made to yield their secrets. One of the most experienced members of the geological staff of the Government of India accompanied the Afghan Boundary Commission in 1885–86, and contributed a full report on the geology of the tracts traversed by the expedition. At the same time another fellow-worker was similarly engaged in the Andamans, whilst valuable notes were compiled by a member of the medical profession about the geology of Gilgit and Baltistan, in North Kashmer. Surveys.

In the south, again, the Kolar goldfields were surveyed, and the opinion was formed that they are not the only ones of their kind in the same tract. To the west, the Singareni coal-fields were found, on examination, to be richer than those at Umaria, just mentioned. Petroleum next engaged attention, and the supplies at Khatan, near Sibi, in Balochistan, at Makum, in the east of Assam, and at Yenanggyaung on the Irawadi were examined, though not with much hope of an abundant outturn. The tin beds in Tenasserim were tested in 1888-89, and the interior of Afghanistan, which had not been visited by the Boundary Expedition, was partly explored by one of the geological surveyors, whose services had been asked for by the Amir for the purpose. Thus, on the whole, the economic aspects of the Survey have of late years been rather more prominent than the purely scientific, and much has been added to the former stock of information regarding the mineral resources of the country, including the existence of gold and precious stones. Scientific inquiry, however, has been pushed on slowly, though much, both in investigation and mapping, remains to be done, especially in Peninsular India. In the upper part of the country more progress has been made, though a good deal of the earlier work may need revision. The central Himalaya, too, between Garhwal and Darjiling, is practically *terra incognita* to the geologist. The same may be said of a good deal of Burma, Balochistan and the tract occupied by the tribes known, collectively, as the Lushai.

## D. Survey of India.

We have now reached the operations of what is *par excellence* the Survey of India, operations that have gained renown in far distant lands for their extent and the boldness of their conception. The three main branches included under the above title are known respectively as the Great Trigonometrical, on which the rest are founded, the Topographical, and the Revenue. But in addition to the actual Survey, the scheme of operations includes a large and highly organised printing and publishing establishment for map-work, and others for the test and repair of delicate instruments and for the reduction and plotting of the field work tabulated during each season.

The great Trigonometrical Survey is approaching its centenary, as it was started in 1800 by Major Lambton, on the recommendation, it is stated, of the Duke of Wellington, when Colonel Wellesley. The triangulation began in Southern India, and the main series was carried up to Central India in 25 years, together with a network of collateral measurements and frequent verification by different base-lines and astronomical observations. A material alteration was made in the system by Colonel Everest, who succeeded Colonel Lambton, and whose name has been given to the highest mountain yet measured on the earth's surface. The great arc was completed in principal triangulation by 1840. Since then the scheme has been filled in on the lines laid down by Colonel Everest, and by 1885 there were no less than 3,665 stations of the principal triangulation marked out. Secondary triangulation is still in progress, but a chain of observations extends now from Balochistan to Bangkok, and from Kandahar to the Dihong, which marks the present limit of our geographical knowledge in North-Eastern Assam, whilst another series passes into Upper Burma, and along the coast towards Siam and Singapore. The eastern frontier

Surveys.

series, as this last is termed, was terminated by the measurement of a final base line in Mergui, the most southern district of Tenasserim, the result being that after 1,000 miles of polygonal measurements the value of the base turned out to be no more than one inch per mile in excess of the measured value, thus triumphantly testifying to the accuracy of the whole operation. The total number of base-lines used in the principal triangulation of India was ten, and the Mergui comparison brought the principal operations to a close after 82 years of labour. The minor series is still in progress, and in British Baluchistan and Upper Burma triangulation has still to be filled in to a large extent.

The approaching completion of the principal triangulation gave the Government the opportunity in 1877 of reorganising the whole Survey staff, by amalgamating the three previously independent branches mentioned above into a single department, to be called the Survey of India. The surveyors employed in the trigonometrical branch had for some years been passing into topographical work, as their original operations came to a close, so that the establishment in the former branch was gradually restricted to those required for minor triangulation and the reduction of field work, for use in mapping and computations for both geographical and geodetic purposes. It may be mentioned in connection with the latter subject that the great arc, by means of the astronomical observations taken along it, has been converted into a most valuable base, used in all the latest and most elaborate investigations of the earth's figure. Similar use, too, has been made of other principal stations since they have been connected by telegraph with each other and with central stations of observation. In the year 1891–92, to take the last with which this review is concerned, six arcs of longitude were completely measured, and all the measures of former years re-computed by a new method that had been found to give more correct results in a delicate portion of the operations. This completed the scheme of differential longitude—determination for India proper, and there now remains the work in connection with the outlying tracts of Burma, Baluchistan, and a part of Persia. In the first-named country the year's work comprised 4,300 square miles of principal triangulation along the meridian of 96° 30′, with a secondary series therefrom of 96 miles eastwards along parallel of 21° north latitude.

The remaining branches of the Survey of India serve to fill up the picture of which the trigonometrical operations have provided the outline. But there is this great difference, that whereas the latter had of necessity to be conducted throughout on a uniform scale, both the former are on varying scales, in conformity with local requirements. Thus the standard scale of the topographical operations is one inch to a mile, but in trans-frontier regions, where the work has to be thrown off very quickly, half, or even a quarter, inch has been found sufficient. On the other hand, in the case of forest tracts, and in some other parts of British territory, the scale is expanded to two and four inches, and in towns and cities to a far larger extent. In the last 16 or 17 years a very large area has been thus dealt with; but, as the index plates of the Indian Atlas show, there is still much remaining in the Madras Presidency, and, necessarily, in Burma also; but in Upper India only a portion of Western Rajputana is still a blank. In 1891–92 a party was detached for service in the territory surrounding Aden, and completed the triangulation of 7,000 miles, of which 4,400 were filled in with details. Thus the whole tract in South Arabia under British influence was traversed.

The Topographical Survey.

Perhaps the most interesting expeditions of the last 15 years or so have been those to the east and north-east of Assam and over the almost desert tracts of Sewestan and Western Baluchistan. The large State of Mysore was also completed in 1886, and the establishments thus released were transferred to the equally interesting country under the Travancore and Cochin States. The forest surveys, too, may be mentioned under this head, as they occupied a good deal of time between 1887 and the end of the decade. In the Bombay Presidency they were initiated as a special branch of the Survey of India in 1888; and in Madras, as well as in the Central Provinces, during both that year and the following, parties were detached for the purpose, to which great importance is attached. The scale of mapping, as has been mentioned above, is considerably larger than the average, and the detail entered is considerable. In 1891–92 two districts in the Central Provinces were completed and a third was begun. In Bombay 437 square miles were finished, and advance

Forest surveys.

triangulation

triangulation was taken up over a considerable area. The Madras out-turn, chiefly in Coimbatore and Madura, amounted to 659 square miles. The party in Burma encountered exceptionally difficult country in the part of the Toungoo district in which it was at work, but managed to complete 294 miles. The cadastral party in the Jalpaiguri Duars of Bengal also took up a forest tract of 327 square miles, which was duly completed. Altogether, the year's work amounted to 2,245 miles. Surveys.

The cadastral survey for revenue purposes is chiefly employed in Upper and Central India, each of the two Provinces of the Peninsula having, as has been before mentioned in treating of the administration of the land, an independent department for this purpose. In Bengal sundry detached parties have worked at different times on special localities, such as the Diarah survey of the Megna Delta, where the numerous channels and sandbanks render it necessary to demarcate accurately and finally the village boundaries. In Chittagong, Jalpaiguri and parts of Orissa, too, operations have been undertaken at different times and on special classes of land. Amongst other detailed surveys of this class is that of Calcutta and the Hughli river, on a large scale, and in the case of the city, with a minute record of boundaries and estates. Then again, the Sikkim party, detached from this branch in 1879, executed work which was found of the greatest service when that State was occupied in 1888–89. As regards the cadastral surveys of the Panjab, North-west, and Central Provinces, it may be said that in the former, the results of the cadastral operations carried on by the trained village accountants turned out sufficiently accurate to form a basis for small scale maps prepared according to traverse-points connected with the general trigonometrical series. A similar connection was made in the case of the North-west Provinces, and special revision was undertaken in the hilly country of parts of Bombay, where the local Revenue survey results could not otherwise be brought into harmony with those of the trigonometrical. In the Central Provinces the work consisted chiefly of preparing the skeleton plots of villages to be filled in by the village accountants working under the Settlement officers. In both divisions of Burma considerable progress has been made by this survey, and the out-turn of the season of 1891-92 was 1,100 square miles in the Lower, and over 2,500 miles in the Upper, exclusive of traversing for the next year's operations. Altogether in the four Provinces where cadastral work was in progress, the area completed in the year was 6,600 square miles. The cadastral survey. Jalpaiguri.

## E.—Geographical Surveys and Exploration.

There are few parts, if any, of the work of the Survey of India that in the present day, and in the present conditions of Indian administration, have more value and are of more interest to the general public than the scientific expeditions of either survey parties or individual explorers into the comparatively little-known tracts that border on the northern frontiers of British India. It is unnecessary to include in this review a notice of the heavy work that fell upon the Survey of India in connection with the military operations in Afghanistan in 1878-80, beyond mentioning that over 54,000 square miles of survey, chiefly on the quarter-inch scale, were accomplished by the end of the campaign. The next tract on the North-west frontier that was dealt with was Gilgit, which, with the surrounding country, was surveyed during 1880-81. In the following year, the Zhob valley, between Balochistan and the Panjab, together with a portion of the Waziri country, was added to the record, and in 1883 the chief peak of the same system of mountains, known as Solomon's Throne, was scaled, and the sources of the various streams flowing through the surrounding tracts were explored. The same year is noteworthy for the adventurous expedition of Mr. McNair and a Musalman companion trained under the Survey Department, and there known as "the Saiad," into the borders of Kafiristan, the inhabitants of which had hitherto defied exploration, and are accredited accordingly with traditional origin either from the Arya clans which first entered India from West-central Asia, or, again, from the Macedonian garrison left by Alexander on his route from the Bamian Range to Alexandria "Eskhaté," where his expedition into Central Asia terminated. Curiously enough, there are few tracts less known to explorers than the defiles

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by which the two great trans-Himalayan rivers of India enter that country from their northern head-waters. During the decade certainly one of them, if not both, may be said to have yielded to the pertinacious solicitation of the survey. The space between Hazára in the Panjab and Gilgit was explored by a Musalman surveyor early in the eighties, and he was followed in 1888 by a party accompanying the military expedition to the Black Mountain country. The case of the Brahmaputra is more doubtful, though, probably, the exploration of Mr. Nedham from the south, and of the semi-Thibetan known as A.K., from the opposite direction, may be held to have connected the great river, through the Dihong, with the San-pu, between Thibet and the Himalayan northern face. At all events, the claim of the Irawadi to the reversion of the latter has been practically disproved. The mention of A.K., whose real name was Kishen Singh, a native of the Milm tract in northern Kumaun, gives an opportunity of pointing to the extensive and valuable information obtained by the Survey through natives of the frontier mountain tracts who have either passed their novitiate in the regular work of the Department, or like A.K., had taken to exploration by instinctive aptitude. The latter, with one companion for the greater part of the time, passed nearly four years continuously on the Thibetan plateau, from the Himalaya to the Mongol desert, returning by the south-eastern valleys to within a few miles of the Assam frontier, where he was headed back to a point higher up the San-pu. A portion of the tract he traversed was afterwards visited in 1885 by Mr. Carey, not a member of the Survey, but a traveller by predilection, who filled up the gap between the accounts of Presjewalski and of A.K.; and later by Captain Bower who traversed Thibet from west to east, with a native surveyor as his companion. In addition to these travellers we have two native explorers of Eastern Thibet, one of whom seems to have exploded the tradition of the ring-shape of Lake Palti, by finding it to be that of a horseshoe. Bhotan was visited by four, and Sikkim and the lower San-pu by two, natives of the Bengal Himalaya. The work done in Burma and on its frontiers is perhaps greater in amount than that recorded in any other portion of the sphere of action of the Survey, and the country between Assam and the Chindwin river, too, was thoroughly surveyed in 1886-87. Since then, parties have been repeatedly detached for similar duties in the hilly country of the Chin, Kachin, and Shan tribes, bringing back, as usual, much information useful not only in their own survey work, but in furtherance of ethnological inquiry.

Finally, there should be mentioned the advantage taken of the Afghan Boundary Commission to extend our knowledge of the country to the west and north-west of the Amir's dominions. Between 1884 and 1886 operations were carried on, first from Khalat to the Helmand, and up to Kuhsan; then between Kuhsan and Mashad and the Bamian range; afterwards northwards to Balkh, and from Zulfikar to the Oxus at Kham-i-ab, and from Andhkui to complete the circuit to Balkh. The whole area surveyed was about 110,000 square miles. The geographical part of the survey was supplemented by the geological investigations carried on by the special officer deputed to accompany the party from the Geological Survey Department, and was continued to the eastwards of the tract officially within the province of the Expedition by an independent journey from the north-east of Kashmer, undertaken by Mr. Ney Elias of the Foreign Department of the Government of India, who had previously made a name as an explorer by his travels in the Mongol deserts. The zoological and botanical researches which the Expedition rendered possible were placed in the hands of Dr. J. Aitchison, and the results are recorded in detail in the transactions of the Linnean Society of London. Altogether, the work of the last fifteen years or so brought to completion by the Survey of India, forms a record with which, for the actual ground traversed, the variety of the information acquired, the scientific thoroughness with which the results have been brought to book and sifted, not to mention the physical labour and endurance involved in their collection, it would be difficult, if not impossible, to find a parallel in any other country.

### F.—Archæological Survey.

The last survey with which this review has to deal is of a very different character to its predecessors in the present chapter, and is concerned exclusively with the work of man, not of nature. Shrines, carvings, inscriptions, and frescoes

frescoes are the materials on which it works. The description and preservation of the monuments of olden time, the excavation and discovery of those previously unknown to the present generation, the collection, comparison, and deciphering of inscriptions on metal plates, or masonry, stone, or rock, and their allocation in correct chronological sequence, and, in some instances, the acquisition of manuscripts throwing light on the above subjects, all these have at some time or another occupied the attention of the numerous *savants* who have been employed by the Government of India on the heterogeneous tasks that are comprised under the general title of an archæological survey. Surveys.

The Survey in question may be truly said to have originated, along with the Bengal Asiatic Society, in the researches of Sir William Jones and his colleagues about 1784 and the following years; and amongst other landmarks in its subsequent development we may note, first, the decipherment in 1830, or thereabouts, by Mr. Prinsep, of the rock-cut and columnar edicts of Asoka, and, secondly, the publication of Fergusson's "Indian Architecture." Through the former was recovered the date which, as a more recent scholar has said, is the "sheet-anchor of Indian chronology," whilst the latter called attention to the startling fact that a *replica* of this valuable document was doing duty as a street-roller in an Indian city! The outlines of an archæological survey were sketched as far back as 1848 by General Sir Alexander Cunningham, who subsequently had the task of supplying so much of the material for which he then pleaded. In 1861–62 he was placed in charge of the operations he had recommended in Upper India, and began his work in the birth-country of Buddhism on the basis afforded by the narratives of the Chinese pilgrims of the fourth and seventh centuries of the Christian era. He had time to work up the Ganges Valley, and to pursue his investigations as far as the north-west of the Punjab, the tract visited by Alexander the Great, before his deputation came temporarily to an end in 1886. A few years' interval, which was spent in local investigation in Orissa and along the west coast, was followed by the resumption of the reins of the inquiry by General Cunningham, who held them until his retirement in 1885, after a service of no less than 54 years. His resignation necessitated a reorganisation of the Archæological Survey, which was divided, in Upper India, into three surveyor's charges. Bombay and Madras had, from the beginning, been placed under separate authority, and Dr. Burgess, who had been at the head of the operations there, was made Director General of the whole Survey. For the special work of examining the condition of the monuments in some of the chief cities of Upper India, an officer was deputed in 1880, who made reports on this point, with proposals for the preservation of those in danger of falling to ruin. Similar steps had been taken in Madras between 1875 and 1879, and in 1881 the Survey of that Presidency was made over to Dr. Burgess, who had for the previous 10 years been engaged on like work in Bombay. Amongst other tasks performed at his suggestion was the complete series of copies of the fresco work at the well-known Ajanta caves, in the Nizam's territory, a task undertaken by Mr. Griffiths, Superintendent of the School of Art, Bombay, and which occupied him, with a selected class of his pupils, nearly 13 years. Another was the series of copies and translations of the inscriptions of Western India, published by Dr. Burgess and Mr. Fleet, the latter of whom was also for some time charged with the corresponding duty for the whole of India, and succeeded in elucidating many of the knotty points involved in the chronology of the Gupta dynasty. For the inscriptions of the Dravidian, or South Indian country, a special arrangement was made, under which Dr. Hultzsch was placed in charge of the transcription and deciphering work. In the North-West Provinces Dr. Führer undertook epigraphical research in addition to general antiquarian inquiry. In Burma much was done in the same way by Dr. Forchhammer before his death in 1890, and he left much valuable material which will be available for future inquirers; but the Province has not yet been subjected to anything like the same careful and minute examination, especially in the outlying tracts, that has had such valuable results in India proper. The manuscript collection, however, is unusually complete, and the progress of the survey, though retarded by the death of its chief, has not by any means come to an end. The retirement in 1889 of Dr. Burgess brought the general position again under review, and no successor was appointed. The very considerable amount of material collected but not yet arranged, sifted, and issued, was left in the hands of Dr.

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Burgess for publication. The actual operations in India were put under three Superintendents, one for Western, one for Southern India, and one, with an architectural assistant, for the North-west Provinces. The publications of the Department have been very numerous, and much of their contents has been incorporated into the works of European scholars, who have taken the occasion to express their appreciation of the information thus made available to them, and which, but for the action of the Government of India in undertaking this survey, would probably have never come within their reach. The work itself is of such a nature that to enter into a description of it here would be altogether inconsistent with the purpose of this review. The reader must therefore be referred to the annual reports of General Cunningham and Dr. Burgess, to Mr. Sewell's reports on the archæology of Southern India, and especially on the Amravati stupa, and the "Indian Antiquary." Whilst as regards inscriptions, Messrs. Burgess and Fleet's work on Pali, Sanskrit, and Old Kanarese, the "Corpus Inscriptionum Indicarum," and its supplement the "Epigraphia Indica," together with Dr. Hultzsch's volumes on Madras work, should be consulted.

## CHAPTER XIX.

## VITAL STATISTICS AND SANITATION.

Vital Statistics and Sanitation.

The registration of births and deaths is at present, relatively speaking, in its infancy in India. In the towns decided progress has been made, and, on the whole, the record of deaths there is probably approaching accuracy. This, however, cannot be said of most of the rural tracts. Even here, however, there is to be found great variety in the efficiency of the performance of this duty, especially in the matter of births, but for general analysis with a view of ascertaining the life values of the population, little use can be made of the ordinary annual returns. Nor, again, do the decennial census tables give much more information until they have been subjected to a course of adjustment of an extent and scope that would be considered out of place in the corresponding task in western countries. There are, indeed, but few of the masses who are able to return their correct age, and still fewer whose horoscope is preserved, or who could make any use of it even if it were available In forming an estimate, therefore, of the probable rates of mortality in India, reliance has to be placed no the results of registration in certain areas where they have been found by experience to be fairly accurate, or amongst special communities placed for special purposes under unusually good observation. The population of the chief cities, for instance, will not yield, as a rule, such results, owing to their tendency to attract an abnormal proportion of adults or persons in the prime of life, many, if not most, of whom are in the habit, of leaving their families in their native place, so that whilst the city get the credit of all the deaths amongst them, the proportion of births lags far behind. An exception to this rule is found to a great extent in Madras, where, as has been shown in former chapters of this review, there is but little manufacturing or foreign trade industry compared to what is found in Calcutta or Bombay. In the concluding chapter of this work, too, it will be shown that the immigrant population in Madras is proportionately far below that of the two other cities, and as the registration is probably all the more easy on this account, the population of the capital of the south was taken as one of the standards for the adjustment of the crude census returns. In the North-West Provinces again, the prevalence of the practice of female infanticide amongst certain castes has led to the adoption of a special procedure of registration, so that here is to be obtained a far better record of infant life and death than amongst any of the ordinary communities of rural India. At the end of the Census Returns, Vol. II., will be found the results of the examination of the age-tables and the deductions drawn from them by a skilled actuary, so far as the intercensal period 1881–1891 is concerned. This, it may be observed, was a period that, so far as the term is applicable to Indian conditions, may be called one of normal progress. That is, there was no great or wide-spread drought or failure of crops. Here and there, as is inevitable, local distress prevailed from time to time, but, taking the country, or even one of its provinces, as a whole, there was none of the excessive fluctuations of circumstances that have so often thrown out of line the facts of Indian life as we gather them from their statistical representation.

Comparison of Indian and English life-values.

This, however, is a topic which it is not within the scope of this review to discuss in detail. It is enough to mention that the general results, which confirm the corresponding investigation made on the basis of the preceding census, tend to show the inferiority of the masses in India to those of the temperate

VITAL STATISTICS AND SANITATION.

zone in point of vitality. The following figures, perhaps, will serve instead of more lengthy explanation :—

| AGE. | Mean after-Lifetime, in Years. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | England. | | India. | | Madras. | | Bengal. | | Bombay. | | Panjab. | |
| | Males. | Females. | Males. | Females. | Males. | Females. | Males. | Females. | Males. | Females. | Males. | Females. |
| At birth | 41·35 | 44·62 | 24·59 | 25·54 | 26·92 | 27·99 | 22·78 | 23·73 | 26·12 | 27·07 | 26·58 | 27·62 |
| 10 years old | 47·60 | 49·76 | 35·46 | 34·40 | 38·70 | 37·78 | 33·85 | 32·76 | 37·20 | 36·15 | 38·07 | 37·13 |
| At 20 „ | 39·40 | 41·66 | 29·24 | 29·28 | 32·55 | 32·78 | 27·77 | 27·76 | 30·87 | 30·92 | 31·76 | 31·97 |
| At 40 „ | 25·30 | 27·46 | 18·75 | 20·20 | 21·06 | 22·78 | 17·98 | 19·43 | 18·94 | 20·01 | 20·22 | 21·89 |
| At 60 „ | 13·14 | 14·24 | 10·12 | 10·87 | 11·06 | 11·89 | 9·89 | 10·65 | 9·59 | 10·24 | 16·41 | 12·33 |
| At 80 „ | 4·79 | 5·20 | 3·65 | 3·76 | 3·85 | 3·97 | 3·59 | 3·70 | 3·39 | 3·47 | 4·48 | 4·63 |
| Birth rate | 31·4 | | 46·6* | 44·6* | 44·0* | 41·0* | 52·9* | 50·8* | 44·4* | 42·4* | 43·0* | 40·9* |
| Death rate | 20·2 | | 40·6 | 38·6 | 38·0 | 35·0 | 45·9 | 43·8 | 36·4 | 34·4 | 37·0 | 34·9 |

* Normal.

Now this table shows that the Indian infant at birth has only from 24½ to 25½ years of life to expect, whilst its fellow-subject in England may look forward to between 41 and 44½. In both countries the girl has a better chance during infancy than the boy. But the more important feature to which attention is directed is the remarkable difference between the two in respect to infant mortality. In the tropical country, out of every 100 boys born, more than 27 die before they have lived a year. The girls are more hardy to the extent of three, and only 24 drop off. In England the corresponding figures are 17 and something between 13 and 14. Remembering the prominence given to marriage in the social life of India, and the abnormal prevalence of the conjugal state, it must be clear that were it not for this high infant mortality the country would very soon be too narrow for its inhabitants, especially, as will appear later on, now that the provision of medical aid is so much larger, the progress of vaccination so much more rapid, and the steps taken to resist the demands of famine for its human sacrifices, so much more effective than of yore. It has been recently stated that the experience of some life Insurance companies in India is in favour of a nearer approximation of the values of native and European life. It is possible that this is the case, considering the character of the population of a class to have recourse to such a provident device. But the general remarks made above apply to the masses, not to what may be termed the "selected lives" of the middle classes of the larger towns, and though there are, doubtless, periods in life at which the Indian who has weathered the more dangerous years is more on a par with his European compeer, there is no doubt that the average vitality of the bulk of the population is, as has been remarked above, considerably lower than any to which we are accustomed in the West. Some of the more prominent conditions that tend to this result will be cursorily mentioned in the concluding chapter, but they appertain to an order of things far beyond the scope of the Administration, of which alone this work is the record. We pass on, therefore, to the consideration of the returns of deaths as we find them in the Provincial Returns. As to their numerical relation to the population at large, it may at once be admitted that, as a rule, the proportion is far below the real figure. It is not so in all provinces, however, though in all there may be said to be a deficiency to some extent. The best returns seem to be those of the Central Provinces and Berar, and next to them those of the North-West Provinces. In the present stage at which registration has arrived in India it is of no use to deal with a series of such returns as a means of gauging the rate of mortality, with the view of ascertaining whether or not it has varied during the period dealt with, for every fresh access of zealous supervision is at once followed by a rise in the under

number of deaths brought on to the register, and the consequent consternation of the inexperienced inquirer. But the tables are not without their uses. Even if the total number of deaths vary unduly on paper, it is not probable that the entries of the different causes of decease will be materially altered. We can thus appreciate the relative prevalence of each noted cause, not by comparison of the deaths recorded against it in the current and past years, but by taking it in its relation to the actuals of the year itself. But here, again, a new difficulty is met, in that the diagnosis of the village accountant or municipal inspector by whom the record is kept is of a frankly simple character, and liable to error. Small-pox he knows, as it is under the tutelage of a special goddess, at whose shrine the ministration of the village menial is required, and rags have to be tied in her honour to the tree that overhangs it. Cholera is held in much the same estimation, but the symptoms are more difficult to distinguish. Snake-bite, too, the deaths from which vary less in number from year to year than those from any other cause, is too often credited with sudden deaths due to fits or poison. The great stand-by of village pathology, therefore, is the comprehensive title of fever. Some form of what is probably legitimately brought under this head is undoubtedly remarkably prevalent in almost every part of India at some time or other of the year, but it is not likely that the high proportion of deaths set down to it is in accordance with fact. The following table gives in proportional form the registered deaths from the chief causes for three years of the past decade. The ratio is, as above explained, taken to the total deaths of the year, not to the total population, since the base in the latter case ought, obviously, to be advanced or brought back with the variation of each year, a process which, except on somewhat arbitrary rules, is hardly feasible in the constant fluctuations of the Indian seasons which affect the death-rate to an extent admittedly abnormal. A not unusual plan, on the other hand, and one even more open to objection, is to retain the figures of one census until those for the next are available, when, on their application, the results of the ten years' accretion of population appears in the strangely reduced rate of the eleventh.

PERCENTAGE OF EACH CAUSE OF DEATH ON TOTAL ANNUAL DEATHS.

| PROVINCE. | Cholera. | | | Small-pox. | | | Fevers. | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1881–82. | 1886–87. | 1891–92. | 1881–82. | 1886–87. | 1891–92. | 1881–82. | 1886–87. | 1891–92. |
| Bengal | 6·39 | 8·17 | 12·10 | 1·89 | 0·27 | 0·84 | 74·53 | 72·32 | 70·09 |
| Madras | 1·93 | 2·17 | 13·25 | 3·43 | 3·07 | 5·49 | 43·56 | 40·07 | 33·06 |
| Bombay | 4·46 | 0·04 | 3·51 | 0·14 | 0·23 | 0·29 | 71·39 | 73·75 | 71·93 |
| North Western Provinces | 1·92 | 2·32 | 10·95 | 1·21 | 0·68 | 1·78 | 78·46 | 82·90 | 70·70 |
| Panjab | 0·96 | 0·00 | 1·67 | 1·35 | 2·19 | 0·50 | 68·27 | 67·06 | 73·79 |
| Central Provinces | 3·73 | 5·80 | 6·71 | 0·83 | 0·95 | 0·24 | 59·75 | 60·07 | 60·70 |
| Lower Burma | 8·62 | 7·02 | 2·74 | 3·45 | 0·20 | 1·81 | 48·27 | 49·12 | 49·31 |
| Assam | 6·94 | 15·87 | 16·00 | 4·17 | 0·45 | 1·33 | 58·33 | 50·79 | 50·67 |
| Berar | 3·90 | 1·01 | 6·96 | 0·29 | 0·12 | 0·03 | 54·54 | 47·92 | 43·48 |
| TOTAL INDIA | 3·53 | 4·16 | 9·81 | 1·62 | 1·02 | 1·67 | 69·70 | 69·24 | 64·20 |

| PROVINCE. | Bowel Complaints. | | | Injuries. | | | Snakes and Wild Beasts. | | | Other Causes. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1881–82. | 1886–87. | 1891–92. | 1881–82. | 1886–87. | 1891–92. | 1881–82. | 1886–87. | 1891–92. | 1881–82. | 1886–87. | 1891–92. |
| Bengal | 4·57 | 3·88 | 2·36 | 1·73 | 1·98 | 1·52 | 0·87 | 0·82 | 0·63 | 10·02 | 12·56 | 12·46 |
| Madras | 4·08 | 4·51 | 4·55 | 2·36 | 2·35 | 1·34 | 0·21 | 0·36 | 0·23 | 44·42 | 47·47 | 42·08 |
| Bombay | 7·87 | 9·71 | 7·41 | 1·57 | 1·57 | 1·17 | 0·26 | 0·26 | 0·25 | 14·31 | 14·44 | 15·44 |
| North Western Provinces | 5·92 | 4·02 | 3·35 | 1·50 | 1·63 | 1·92 | 0·36 | 0·48 | 0·41 | 10·63 | 7·97 | 10·89 |
| Panjab | 3·27 | 3·59 | 2·00 | 1·15 | 1·00 | 0·98 | 0·15 | 0·20 | 0·14 | 24·85 | 25·96 | 20·92 |
| Central Provinces | 9·13 | 8·37 | 6·71 | 1·66 | 1·36 | 1·60 | 0·41 | 0·34 | 0·45 | 24·49 | 22·61 | 23·59 |
| Lower Burma | 6·90 | 3·51 | 5·48 | 0·90 | 1·27 | 1·00 | 0·29 | 0·36 | 0·35 | 31·57 | 38·52 | 49·63 |
| Assam | 13·89 | 13·49 | 9·33 | 1·30 | 1·45 | 1·06 | 0·56 | 0·33 | 0·27 | 14·81 | 17·62 | 21·34 |
| Berar | 15·58 | 17·71 | 19·13 | 1·26 | 1·02 | 0·94 | 0·28 | 0·24 | 0·15 | 24·15 | 31·98 | 29·31 |
| TOTAL INDIA | 5·72 | 5·30 | 4·11 | 1·60 | 1·75 | 1·49 | 0·46 | 0·50 | 0·40 | 17·37 | 18·03 | 18·32 |

Vital Statistics and Sanitation.

One of the first points to note in regard to the above proportions is the general uniformity, when the mass of figures is considered as a whole. An exception to this rule is found in cholera, and, to a far smaller extent, the same may be said relative to small-pox. Cholera, however, as the following table of the actual figures will show, varies in its demands on the life of the population from year to year more than any other disease. The last year of the decade

| Year. | Cholera. | Small-pox. | Fevers. | Bowel Complaints. | Injuries. | Snake-bite. | Total. |
|---|---|---|---|---|---|---|---|
| 1881-82 | 161,106 | 74,293 | 3,179,058 | 260,641 | 73,403 | 18,670 | 4,560,739 |
| 1882-83 | 350,172 | 85,138 | 3,128,985 | 281,470 | 74,041 | 19,519 | 4,757,515 |
| 1883-84 | 256,413 | 232,426 | 2,883,101 | 262,030 | 76,059 | 20,067 | 4,605,638 |
| 1884-85 | 282,815 | 333,382 | 3,309,906 | 275,443 | 76,583 | 19,629 | 5,239,221 |
| 1885-86 | 378,222 | 80,650 | 3,396,239 | 293,638 | 83,261 | 20,142 | 5,169,890 |
| 1886-87 | 209,150 | 51,112 | 3,474,196 | 265,757 | 87,724 | 22,134 | 5,016,877 |
| 1887-88 | 475,675 | 65,757 | 3,584,876 | 291,745 | 82,445 | 19,740 | 5,508,454 |
| 1888-89 | 269,862 | 93,568 | 3,374,685 | 252,200 | 86,024 | 20,571 | 5,087,138 |
| 1889-90 | 418,607 | 130,695 | 3,528,104 | 274,758 | 91,701 | 22,480 | 5,534,689 |
| 1890-91 | 292,528 | 120,554 | 4,110,044 | 230,899 | 87,495 | 21,412 | 5,933,129 |
| 1891-92 | 583,634 | 98,844 | 3,822,358 | 244,889 | 89,184 | 21,389 | 5,953,518 |

was a particularly bad one in this respect in every Province except Burma and Bombay, and the number of deaths attributed to it exceeds the corresponding figure in any of the other years quoted. As to small-pox, the three middle years of the decade were remarkable for the absence of this malady, and the greatest prevalence is found between 1883 and 1885. The head of "bowel complaints" has lately been decided to be too comprehensive, and as there are generally separate vernacular names for dysentery and diarrhœa, the deaths from what passes by those names have been separately recorded from 1891-92 onwards. Injuries include suicide, a form of escaping from the troubles of life that is less unpopular in India than in England, and usually takes the form of plunging into a well. The return of deaths from snake-bite is, we have mentioned above, perhaps the most uniform in India. The average of about 20,000 per annum is well maintained, and the feature is found in nearly all Provinces. We then come to the deaths from causes not specified in the return. Here, of course, local custom seems to be allowed considerable liberty of action. In Bengal, Bombay, and the North-West Provinces it is clear that preference is markedly given to fevers over the general heading, but in Madras, Lower Burma, and Berar, especially the first named, a very high proportion of the deaths are from causes not recorded in the general return.

Deaths caused by snakes and wild beasts.

In connection with the deaths from wild beasts and from snake-bite, special returns are annually published by the Government of India, and rewards are given, on different systems and scales, for the destruction of the species of animals to which this mortality is due. As regards the prevention of mortality due to wild beasts, the general plan is to authorise the grant of rewards, by police and revenue officers, for the destruction of such animals, in the outlying parts of a district, where the quarry is generally to be found, so that by doing away with the necessity of a long journey to obtain the reward, the pursuit of the animals in question may be encouraged. Special rewards, again, are offered as soon as it is found that certain beasts have taken to attacking man or even cattle on a large scale. For instance, as much as 300 rupees was offered in 1892 in the Central Provinces for a single transaction. Licenses without fee under the Arms Act are freely given, and shooting parties, especially where man-eaters are marked down, are encouraged. In the year 1892, which is the last for which information is available, over 24,000 fresh licenses were granted, making a total of this class of permit of more than 69,000. The amount spent in rewards was Rx. 10,648, or nearly the same as in the preceding year. The scale

scale of reward differs, as remarked above, in the different Provinces. For instance, tigers cost on the average Rs. 8·5 only in the North-West Provinces in 1891, but Rs. 35 in Burma, and the average rose to Rs. 48 in the Central Provinces adjoining the Madras jungles, where man-eaters are more common, and the pursuit more difficult and dangerous.

The number of deaths from snake-bite is far greater than that resulting from the attacks of wild beasts, and the evil is a more difficult one to deal with adequately and efficiently. One of the more general measures that has been pressed upon the attention of local and municipal officials by the Government is the destruction and eradication of jungle undergrowth and of the prickly pear that flourishes so luxuriantly round the village sites in many of the dryer tracts of India. Both the above, with aloe hedges and the like, are favourite resorts of snakes, which are all the more likely to be disturbed, therefore, on their outward and homeward trips, owing to the proximity of habitations. In some cases a system of rewards is said to be efficacious, but experience on this point is not conclusively in favour of its adoption. The most striking instance is that of some districts in the Bombay Presidency, where the "phursa" (*echis carinata*) is peculiarly abundant, and, being a small reptile, dull in colour and fond of long grass, the mortality from its bites is considerable. A small reward evoked a class of professional snake-killers in the districts in question, and out of 511,000 snakes returned as having been killed, apparently for rewards, in the whole country, in 1890–91, no less than 406,000 were slain in the above tract. The rate of remuneration was halved in the one case, and in the other, instead of spreading the possibility of earning the same over the whole twelvemonth, the "open season" for this pursuit was restricted to two months before the reptile breeds, so that the professionals, instead of making enormous bags of the comparatively innocuous young, had to encounter the more active and dangerous full-grown animal. Instead of the number above-mentioned, therefore, the return for 1891 showed a tale of no more than 2,803 snakes killed in Bombay, and a decrease in the whole country from 511,000 to 85,160. As the experience of the last two years has not shown the number of deaths in these districts to have increased, the local authorities propose to watch the returns carefully for a further period, in order to ascertain the result of the cessation of the reward system on its former lines.

The Report of the Sanitary Commissioner with the Government of India on the vital statistics of the year is presented annually to Parliament, it is not worth while to here reproduce the substance of the reviews of the main features of the relative health and mortality of India during the decade, especially when we consider the curious fluctuations to which life in that country is subjected. There is nothing at present which will justify the general conclusion that there has been a change in either direction. As regards cholera, the advance made appears to be in the direction of restriction of its outbreaks, rather than of its prevention. Where formerly it was allowed to spread, the present system of segregation, hospital attendance, the removal of filth, and the destruction of contaminated material, all seem to help to keep an outbreak more within its place of origin, and to protect the inhabitants of the surrounding country. Still, when all is told, it must be admitted that the actual outbreaks are not less numerous, though they may affect a smaller population respectively, nor has the effect of the seizure on the patient been substantially mitigated, except within the immediate vicinity of a State Medical Institution. In the matter of small-pox, however, the prospect is more encouraging, as there is a good deal of testimony to the effect that though not by any means eradicated, the attack is milder, and it is stated that the number of blind, half-blind, and pock-marked young people of both sexes is far smaller in the present day than was the case formerly. In connection with this matter, it may be mentioned that the Census Superintendent of the Punjab in his Report points out first, that the return shows blindness has decreased during the decade in general accordance with the territorial spread of vaccination, and, again, that the blind are in the highest proportion where the same feature is found in the return of deaths from small-pox. In the neigbouring Province, too, it is found that to some extent the prevalence of blindness varies inversely with the relative number of vaccinations. These facts are not, of course, conclusive, as there are several other factors to be considered in the case, but vaccination appears to be here having its usual beneficial effect. The following table gives the number of

VITAL STATISTICS AND SANITATION.

persons vaccinated during the alternate years of the decade. The progress, though slow, is fairly continuous.

NUMBER OF PERSONS VACCINATED.

| PROVINCE. | 1881-82. | 1883-84. | 1885-86. | 1887-88. | 1889-90. | 1891-92. |
|---|---|---|---|---|---|---|
| Madras | 590,875 | 735,808 | 742,863 | 724,306 | 847,899 | 1,006,068 |
| Bombay | 749,429 | 845,658 | 884,780 | 914,941 | 945,614 | 882,916 |
| Bengal | 1,284,925 | 1,284,467 | 1,284,174 | 1,639,094 | 1,703,288 | 1,547,982 |
| North-West Provinces | 767,259 | 649,067 | 697,610 | 751,875 | 800,757 | 1,059,981 |
| Panjab | 663,294 | 625,235 | 603,584 | 666,526 | 924,814 | 801,669 |
| Central Provinces | 369,651 | 392,934 | 366,338 | 411,908 | 396,584 | 445,720 |
| Assam | 40,309 | 78,357 | 115,642 | 127,303 | 130,238 | 180,211 |
| Coorg | 4,887 | 4,615 | 10,074 | 9,278 | 8,747 | 10,430 |
| Berar | 90,169 | 79,204 | 91,094 | 87,993 | 93,851 | 126,536 |
| Upper Burma | — | — | — | — | — | 57,985 |
| Lower Burma | 50,677 | 73,269 | 63,516 | 73,847 | 120,552 | 129,509 |
| TOTAL | 4,611,475 | 4,768,614 | 4,859,675 | 5,407,671 | 5,972,344 | 6,249,007 |

Medical Aid.

The next matter that is material to the present subject is the provision of medical aid to the populace at large. In the larger towns there are civil hospitals, under the chief medical authority of the district, in the interior, and under the resident physicians, surgeons, professors at the medical training colleges, and so on, in the Presidency towns. But the chief progress of late years has been in the establishment of small dispensaries at the chief market town of the sub-division. These institutions are usually under the charge of a hospital assistant, or, in the large places, of an assistant surgeon, trained and certificated at one of the Presidency schools or colleges, and almost invariably, a native of the Province in which he is employed. In most of the dispensaries of this class there is accommodation for a few in-patients, but this is not used so much by the public as in cases of accidents or injuries sent for treatment by the police. The chief benefit derived from them lies in the free attendance in certain cases, and in the advice and medicine dispensed morning and evening. Thus the following table shows the preponderance of the out-patients.

| PROVINCE. | Number of Institutions. | | | Average Daily Number of Patients. | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Out-door. | | | In-door. | | |
| | 1881. | 1886. | 1891. | 1881. | 1886. | 1891. | 1881. | 1886. | 1891. |
| Madras | 255 | 307 | 432 | 10,619 | 12,494 | 18,447 | 1,927 | 2,057 | 2,470 |
| Bombay | 187 | 217 | 254 | 13,062 | 15,975 | 17,859 | 1,798 | 1,837 | 2,176 |
| Bengal | 237 | 240 | 283 | 9,395 | 8,576 | 12,160 | 2,091 | 2,422 | 2,653 |
| North-West Provinces | 212 | 244 | 299 | 11,627 | 11,411 | 18,394 | 1,689 | 1,909 | 2,253 |
| Panjab | 185 | 193 | 228 | 11,069 | 11,155 | 14,971 | 1,421 | 1,483 | 1,660 |
| Central Provinces | 81 | 99 | 111 | 4,355 | 5,464 | 5,877 | 335 | 324 | 365 |
| Assam | 25 | 47 | 74 | 448 | 768 | 1,490 | 161 | 201 | 212 |
| Coorg | 2 | 2 | 4 | 162 | 89 | 99 | 28 | 75 | 26 |
| Berar | 36 | 42 | 44 | 1,437 | 1,725 | 1,804 | 77 | 24 | 100 |
| Burma (Upper) | — | — | 45 | — | — | 1,037 | — | — | 318 |
| Burma (Lower) | 27 | 32 | 35 | 721 | 1,169 | 1,545 | 340 | 500 | 680 |
| TOTAL | 1,247 | 1,423 | 1,809 | 62,895 | 68,826 | 93,683 | 9,867 | 10,832 | 12 913 |
| Preceding Year | 1,212 | 1,372 | 1,736 | 57,603 | 64,822 | 87,987 | 8,875 | 10,343 | 10,679 |

The number of institutions has increased it appears by 47 per cent, and the average daily attendance by nearly 50 in the case of out-patients, and by 30 per cent. only amongst the in-patients. The movement for the provision of medical aid to women in India, which was initiated during the decade by the Marchioness of Dufferin and Ava, has begun to have its effect in the increase in the number of female patients, since special hospitals are now in working order at which the fair sex can receive attention with due regard for the customs of their class, or can be visited by trained practitioners of their own sex at their houses, a convenience which was necessarily beyond reach when only the public institutions were available.

The latter are, as a rule, administered, except in the case of the civil hospitals, by local bodies, either the Board or the Municipality, or a joint committee of both. The funds are provided mainly from local resources in such cases, with a supplementary State grant, usually according to the population of the place, or the extent of its sphere of utility outside the town itself, or some more special consideration. Subscriptions, as may be judged from the following table, do not go far towards the total cost of providing and maintaining these

| Province. | Hospital and Dispensary Receipts, 1891–92. | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | State Grants. | Local Fund Grants. | Municipal Grants. | Interest on Investments. | Sale of Securities or Withdrawal of Deposits. | Subscriptions. | | Total Receipts. |
| | | | | | | European. | Native. | |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Madras | 36,591 | 58,385 | 15,147 | 2,042 | 844 | 974 | 650 | 114,633 |
| Bombay | 81,939 | 14,328 | 19,060 | 2,116 | 50 | 151 | 911 | 129,957 |
| Bengal | 34,744 | 15,690 | 20,848 | 6,731 | 1,882 | 2,914 | 13,243 | 101,019 |
| N.W. Provinces | 26,071 | 9,342 | 4,424 | 3,170 | 3,100 | 1,080 | 7,219 | 69,091 |
| Panjab | 5,508 | 21,944 | 22,186 | 604 | — | 1,709 | 852 | 54,250 |
| Central Provinces | 4,665 | 784 | 5,743 | 188 | 250 | 520 | 2,391 | 15,007 |
| Assam | 3,524 | 4,882 | 684 | 124 | 3,152 | 527 | 871 | 13,908 |
| Coorg | 1,160 | 104 | 546 | 20 | — | 95 | 59 | 1,984 |
| Berar | 8,298 | 1,246 | 766 | 266 | — | 4 | 400 | 14,059 |
| Upper Burma | 6,156 | 225 | 4,977 | — | — | 207 | 34 | 11,599 |
| Lower Burma | 1,226 | 7,307 | 13,756 | — | — | 502 | 258 | 23,049 |
| Total | 209,882 | 134,237 | 108,137 | 15,261 | 9,278 | 8,683 | 26,888 | 548,556 |

institutions, but there are others which do not appear in the return which owe their origin entirely to private endowment or subscription, and this is a form of charity which seems quite consonant with the sentiment of the richer members of the community, Brahmanic, Mussalman, Jain, or Parsi; not to mention the Buddhist, with whom endowment is almost an imperative duty.

Sanitation.

Finally, this chapter must close with a few lines on the subject of sanitation, though space will allow of its treatment from an administrative point of view only. In the chapter on municipal administration a good deal was written with regard to the objects on which the funds of such corporations were spent, and the stress laid by the State on the need of careful attention to the water-supply, the deterioration of which is probably one of the most fertile sources of disease that exists in India. As to drainage, it is only in the larger towns that attention has been practically directed towards it on anything like the scale on which the subject is dealt with in the West. The life of the masses is an out-door one for nine-tenths of the year, and though the plan on which villages are arranged too often makes the sanitary condition as bad as in a crowded town, the heat, and in many parts the dry atmosphere, together with the bountiful

VITAL STATISTICS AND SANITATION.

provision of nature in the matter of scavengers, quadruped and biped, feathered and plumeless, effect much in the way of counteracting the otherwise inevitable results. Of late years, however, sanitation has been engaging an unusual amount of attention from the local authorities, so it is worth while to give a summary of what has been the outcome of their deliberations.

Sanitary reform in India received its first impetus from the investigations of the Royal Commission, whose Report on the sanitary state of the Army in India was published in 1863. Since then the application of sanitary principles has been extended to towns and villages in India, and this question has continuously received much attention at the hands of the Government of India. In July 1888 a General Order was published by the Governor General in Council briefly indicating the measures which had been taken to promote sanitation, and the partial success which had attended them. The main points to which attention was requested in it were :—(i.) the establishment of a sanitary board in each Province ; (ii.) the desirability of taking legislative action for the enforcement of sanitary measures wherever the existing law made no provision, or insufficient provision, for that purpose ; (iii.) the provision in every Province of simple rules for the regulation of village sanitation.

The object of the establishment of these local Boards, it was explained, was to enable Local Governments and Administrations to have a central body through which they could operate, and to which, subject in all respects to their orders, would be entrusted the control and supervision over sanitary works, whether taken in urban or rural areas. The functions of these boards, it was added, would not be merely that of a consultative body, but also those of an executive agency through which the Government would act in the Sanitary Department.

Bombay.

The necessary legislative machinery exists in the Bombay Local Boards Act, 1884, which establishes a Local Board in each district, and Taluka Boards in each division of a district under the Local or District Board. In 1889 an Act, called the Bombay Village Sanitation Act, was passed. This provides for the appointment of sanitary Boards and Committees in villages or groups of villages where subordinate agency is required.

In Bombay the Sanitary Board consists of the Sanitary Commissioner and a Sanitary Engineer. The latter is a special appointment, and was sanctioned by the Secretary of State in 1891.

Madras.

In Madras a Sanitary Board was established in April 1891. Here, as in Bombay, the appointment of sanitary Engineer is a special one. It is the duty of this officer to act as adviser to Municipalities and local Boards in all matters relating to sanitary engineering. The Local Government has framed rules as to the duties of the Sanitary Board. The Madras Local Boards Act, 1884, provides what ought to turn out to be an effective agency for village sanitation by constituting Unions to be administered by committees of five, or panchayats, whose principal duties are to provide for the cleansing of the village streets, wells, and the like, and generally for all things necessary for the preservation of the public health.

The Sanitary Board consists only of the Sanitary Commissioner and the Sanitary Engineer.

Bengal.

In Bengal the Sanitary Board was established in 1889, but did not enter fully upon its functions till August 1890. The Board is composed as stated marginally. A special Sanitary Engineer has been appointed as Engineer to the Board, but he is not a member of it. His primary duty is to accompany the Sanitary Commissioner on his tours, and guide the municipalities in getting up projects, and to inspect works while in course of construction, and to report to the Board on the progress made. A general responsibility in connection with village sanitation in the areas under their supervision is imposed on the Union committees, who may be appointed for groups of villages under the Bengal Local Act III. of 1885, but no such committees had been appointed up to the end of 1892. The Sanitary Board holds several formal meetings during the year, at which schemes for sanitary work are discussed and adopted.

President : a member of the Board of Revenue. Members : Chief Engineer and Secretary to Government in the Irrigation Branch of the Public Works Department. Sanitary Commissioner for Bengal.

In

In the North-West Provinces the Sanitary Board was constituted by the Local Government early in 1889. As shown marginally, a special Sanitary Engineer has also been appointed in the North-West Provinces. His services are considered as lent to the municipalities, who contribute for his leave and pension allowances. The duties of the Board and the relations in which it stands to Government and the Sanitary Commisioner on the one hand, and the Local Authorities and the Public Works Department on the other, are regulated by rules framed by the Local Government. The powers of the Local Authorities in respect of village sanitation are thus defined in the North-Western Provinces: Under Act XIV. of 1883, Section 24, the duties of (1) constructing and repairing public wells, tanks, and waterworks, and arranging for the supply of water from them and from other sources; and (2) providing for local works and measures likely to promote the health, comfort, convenience, or interest of the public, are imposed on District Boards, subject to conditions and exceptions which may be made by Government.

N.W. Provinces.

Members of the Board *ex-officio*: the two Secretaries to Government in the Public Works Department, the Senior Secretary being President of the Board; the Secretary to Government in charge of the Municipal and Local Self Government Department; the Inspector General of Civil Hospitals; the Sanitary Commissioner; the Legal Remembrancer; the Director of Land Records and Agriculture; and the Commissioner of each Division.

Two native members for each Division have also been appointed, the nominations being made by the several Commissioners.

In 1891, the North-West Provinces Government prepared a draft Bill regarding sanitation, which was prepared and submitted for sanction, and was approved by the Government of India. The following further Bills were introduced into the local Legislative Council:—

A Bill to confer powers upon Municipalities in the North-Western Provinces and Oudh in respect to the better sanitation and regulation of houses which are let in lodgings, or occupied by members of more than one family.

A Bill to confer powers to impose duties upon municipal authorities in the North-Western Provinces and Oudh for the construction and maintenance of drainage and sewerage works.

In the Panjab the Sanitary Board was constituted in August 1890. The Board consists of the officers annexed marginally. Rules have been framed regulating the duties of the Board; and the necessary legislative powers are provided in Act XX. of 1883, and the Panjab Municipal Act XX. of 1891. The latter confers ample powers on the Local Government to enable it to provide for the sanitation of villages.

Panjab.

The First Financial Commissioner, President. The Chief Secretary to Government. The Secretary to the Government in the Department of Public Works. The Joint Secretary to Government in the Irrigation Department. The Sanitary Commissioner, a Secretary. The Commissioner of the Division in which the Board meets.

The Sanitary Board in the Central Provinces was constituted in 1889. It consists of merely the Deputy Surgeon General and the Superintending Engineer. Act XIX. of 1889 was framed by the Government of India in order to provide a means of enlisting the co-operation of the villagers in carrying out simple measures of sanitary improvement in the rural tracts of the Central Provinces. Rules have been framed under the Act by the Local Administration, and the rules under Section 141 of the Land Revenue Act, imposing on Headmen the obligation of keeping their villages in good sanitary condition, have been revised. The Village Sanitation Act has been extended to 33 villages in the Nimar district, three in the Wardha district, and to one village in each of the districts of Chanda, Bilaspur, Balaghat, and Chhindwara, and in respect of a few of these villages schemes of sanitary reform, framed in accordance with the Act and rules, have been sanctioned.

Central Provinces

The Sanitary Board for the Province of Burma has been in existence since December 1888, and has made some progress in dealing with questions affecting village sanitation, schemes for the water-supply of municipalities, sewage-farming, and the sanitary improvement of the suburbs of Rangoon. This Board consists of four members, with the Financial Commissioner as president. No Sanitary Engineer has as yet been appointed. A set of rules laying down the duties of this officer have been framed in anticipation of his Pppointment. Rules for the guidance of the Board on the model of the Madras Sanitary Board have been adopted, with the exception of the clause relating to the inspection of works, sanctioned by the Board, which will be undertaken by

Burma.

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the Sanitary Engineer in Burma instead of the Engineer member, as at Madras. These rules are under the consideration of the Local Government. As regards villages, a set of simple rules and directions for the introduction of elementary sanitation have been prepared.

Assam.

In Assam the Sanitary Board was established in December 1888. It consists of the members specified marginally. The Board has inaugurated a scheme of sanitation for selected villages, having for its chief object (*a*) the improvement of the drinking water-supply; (*b*) the establishment and maintenance of a proper system of drainage; and (*c*) the prohibition of deposit of manure and rubbish in places where they would be injurious to the public health. The work of sanitation in towns and municipal areas has also been systematically taken in hand under the supervision of the Board.

The Sanitary Comissioner, Assam: the Secretary to the Chief Commissioner of Assam in the General Department; the Secretary to the Chief Commissioner of Assam in the Public Works Department; the District Staff Officer, Assam District; and Secretary, the Assistant Secretary to the Chief Commissioner of Assam, in the General Department.

Coorg.

In Coorg a Sanitary Board, composed as set forth in the margin, was established in 1888. No rules as regards sanitation have yet been adopted. A proposal that the rules for the better provision of sanitation in the Central Provinces should be adopted for Coorg was found impracticable, as they were not suited to that province.

The Chief Commissioner of Coorg; the Executive Engineer; the Civil Surgeon of Coorg.

Berar.

In Berar a Sanitary Board has been created for each district with subordinate local Boards for each village which is not a municipality. No law on sanitation has been applied to the province, but sanitary measures are carried out under the provisions of local rules. The improvement of water-supply at nine places at which fairs or religious gatherings are held has been effected. A sanitary survey of the province is being undertaken by the Sanitary Commissioner.

The above sketch shows the general scheme and the way it has been modifisd to suit local conditions. Its introduction has been as yet scarcely effected in many Provinces and elsewhere, it is too soon to judge of its results. It supplies, however, the systematic direction of sanitary effort, the want of which is so prominent in much of the previous municipal and local action in this line, and this is about as far as the State can effectixely interfere in the matter.

## CHAPTER XX.

## PUBLIC INSTRUCTION.

Public Instruction.

All the branches of the administration that are directly connected with the development of the natural resources of the country or with the material progress of its inhabitants, have now been reviewed to the extent compatible with the scope of this work. As regards progress in other respects, a beginning has been made with the task of instilling into the masses some sense of their responsibility in administering local affairs, by placing it within their power to send representatives of their own to the corporative bodies to whom those affairs have been entrusted. Recourse to the law has been facilitated and rendered more accessible by the multiplication of courts and the simplification of procedure. The chapter on crime, though it cannot be said to bring to light any tendency towards moral improvement, indicates, nevertheless, the petty nature of the greater number of the charges that load the police returns, and if any moral conclusion is to be drawn from them at all, it would possibly be that in the present circumstances, apart from the professional criminal element, which is inevitable in so large and varied a population, the tendency in the population at large was scarcely greater to do wrong than to accuse one's neighbour of so doing. The moral influence of the pacification of the country, and of efficient protection of life and property, together with that of the marked rise in the material standard of living, not to mention the influence in this respect of railway travelling, which should not be overlooked or undervalued, all these have, no doubt, been to some extent counteracted by the tendencies of the existing social system, under which the conventional code of morality, whether of caste or creed, takes its stand on ceremonial, not conduct. But still those influences are not likely to have been without results, though it may be far too soon at present to gauge them. The real education of the masses, therefore, must be left to their surroundings, and when the term "education" is used in connection with the State policy in India it is to be understood in the sense of public or popular instruction, in which form it appears at the head of this chapter.

Genesis of Public Instruction.

Now, so far as education in India consists of the diffusion of instruction amongst the masses, it is the creation not only of the British rule, but of that of the last forty years. Before the acquisition of dominion in Bengal by the East India Company, the system of instruction was practically confined to the study of the scripture of the Brahman and the Musalman; but by scripture is here meant more than mere doctrine or theogony and the like. It includes the whole body of science based on Vedic tradition, and the whole outgrowth of law and tradition depending for its authority on the Kuran. The circumstances of Burma are not in question here, since they came under British cognisance at a far later period than that to which reference is here made. In India proper, then, outside the precincts of the institutions of the highly though narrowly cultivated Pandit or Maulvi, there were minor places of instruction for the lower class of students of the sacred texts. The village pandit or guru had his class, to whom the Sanskrit texts necessary in daily ceremonial were taught by rote, whilst the reader attached to the mosque, in like manner, instructed the faithful in the exact tone and pronunciation and the appropriate gestures without which the repetition of the Kuran was unlawful. The trading classes seem to have managed to maintain small schools under local teachers for the instruction of their offspring in the rudiments of the three R's, and kept the further advance of their knowledge to be gained in the business of the shop. The village school, of which a good deal has occasionally been made, appears to have been either a rote-school for the inculcation of texts, or a secular institution of a very low type, of which few beyond the local Brahman and the trader took advantage. These types survive in all their vigour to the present day.

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Their relative unimportance in the eyes of the ruling authorities can be estimated from the fact that in all the efforts to promote education made by Warren Hastings and his immediate successors there is much about the Sanskrit, Arabic or Persian institutions, but little or nothing about the village school. In 1781 the Calcutta Madrassa, for the study of Persian, was founded, and a decade later the Benares Sanskrit College. In 1818 the renewal of the Charter was accompanied by a formal injunction to the Company to set aside a sum of not less than one lakh of rupees per annum for the revival and improvement of literature, and the encouragement of the learned natives of India, with the introduction and promotion of a knowledge of the sciences amongst the inhabitants of British India. Shortly after, English began to supersede Persian as the official language of the courts, so the demand for instruction in that tongue grew keener. The controversy between the Orientalists and the Anglicists that was waged through the thirties is not yet forgotten, and the compromise made towards the end of that decade was greatly in favour of English, as was to be expected from the intellectual calibre of the respective parties, but the option of instruction in the vernacular was allowed and the existing Oriental institutions were ordered to be maintained in their then state of efficiency. It is unnecessary to enter into the establishment of the foundations of education in different parts of India, but the same general feature prevails throughout them all, namely, the concentration of by far the greater share of both funds and attention on secondary or higher education. The previous history of education in the country led obviously to the adoption of this course.

The Educational Despatch of 1854.

The next landmark in the subject is the despatch of the Court of Directors in 1854, and this may be undoubtedly held to be the great charter of popular instruction in India, and the starting point of the present system. It covers, in fact, the whole ground now occupied. Amongst its most important provisions are (1) the creation of a Department of Public Instruction, for direction and inspection; (2) the establishment of Universities at the Presidency towns; (3) the initiation of training institutions for teachers, the extension of middle-class and primary schools, and the adequate provision of State colleges and high schools, with, also, a system of grants-in aid. The lower and higher schools were to be linked together by a system of scholarships. Attention was to be paid to the development of girls' schools, and, above all, the necessity was insisted upon of bringing education within reach of the masses, without allowing the people to rely solely on the provision of educational establishments by the State, but, through the system of grants and otherwise, to stimulate private effort, so that finally it would be possible for the State to withdraw almost entirely from direct participation in instruction, except in regard to general control and to tracts or classes where its initiative was temporarily specially required. This is but a meagre outline of a masterly State document, but the original is well enough known to render fuller reproduction unnecessary. It was confirmed in 1859, after the assumption of dominion by the Crown, in a second despatch of that year, which, however, reopened the question of elementary education. As regards this important branch of popular instruction, it is remarked, the experience of five years that had elapsed since the system had been introduced showed that whilst private effort came forward with fair promptitude to support English and secondary education, there was a marked reluctance on the part of the native community to co-operate with the State in promoting elementary vernacular education. It was desirable, therefore, that the State should undertake this branch direct, and, if necessary, impose a cess on the land to provide the necessary funds.

The Education Commission of 1882.

Another leap may be made in the history of the subject, over the years between 1860 and 1882. In the beginning of the latter, a Commission was appointed by the Government of India, composed of departmental and executive officers of Government and representatives of the educated native community of each Province except Burma, to which the inquiry was not to extend. The main object was to investigate the working of the system founded in 1854, as was done in 1859, and to ascertain the then actual position of education in India. On two previous occasions reviews had been prepared in the Secretariat of the Government of India, but, what with the lapse of time, and the decentralising policy that had been carried out in the interval,

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interval, by which the control of the Educational Department had been made over to the Provincial Governments, it was found that a more thorough examination of the working of the arrangements and of the results obtained under them should be made than could be hoped for from a mere scrutiny of statistics and reports, without local knowledge to help in explanation or appreciation of the facts thus exhibited.

The report of the Commission, the name of the President of which, Sir W. W. Hunter, is a sufficient guarantee of its literary and statistical merits, was published in 1883. After consulting the local Governments and Administrations on the numerous questions brought to notice in it, the Government of India arrived at the following general opinion:—

> "It appears that the experience of nearly thirty years has brought to light no serious flaw in the general outlines of the policy laid down in 1854 and confirmed in 1859. If in any Province unsatisfactory results are brought to notice, or if the progress made in any particular respect is shown to have been less than might have been hoped for, this will almost invariably be found to have been due to a departure from, or failure to act up to, the principles of the despatches upon which the whole educational system rests."

Quinquennial Reviews.

In pursuance of a suggestion made by the Secretary of State, the Government of India have a quinquennial review prepared of the important features in educational progress since the publication of the last work. During the decade in question two such reviews have been issued. The first, published in 1888, covered the ground between 1881–82 and 1885–86, with the statistics for the following year. The second took up the thread from the latter, and carried the account down to the end of 1891–92. Both are the work of distinguished members of the Bengal Educational Department. On these two works are based the descriptive and statistical remarks that follow. The reviews themselves are so exhaustive, and, being prepared by experts in a somewhat complicated and otherwise difficult subject, so valuable in their analysis, that it must be admitted that the brief summary, that is all for which space is here available, must inevitably be unjust to their respective merits.

Numerical Progress.

The first point is, naturally, the general expansion of the system. The following table accordingly gives the number of institutions and pupils recorded at various periods from the organisation of the Department. It must be mentioned, however, that the figures dealt with here and in the subsequent comments on the reviews in question are those of operations connected with the Department, and do not include those referring to private schools that are not so connected, whether through standards, grants in aid, or inspection. The latter, indeed, are probably not important, either numerically or from an educational point of view, but it is necessary to mention their existence.

| PROVINCE. | Earliest Year. | | | 1870–71. | | 1881–82. | | 1891–92. | |
|---|---|---|---|---|---|---|---|---|---|
| | Year. | Institutions. | Pupils. | Institutions. | Pupils. | Institutions. | Pupils. | Institutions. | Pupils. |
| Madras | 1856–7 | 13,766 | 204,856 | 16,749 | 263,685 | 18,136 | 441,659 | 23,204 | 693,985 |
| Bombay | 1855–6 | 2,875 | 106,040 | 6,134 | 265,793 | 9,664 | 437,746 | 12,272 | 634,438 |
| Bengal | 1854–5 | 25,378 | 527,731 | 41,430 | 878,401 | 59,892 | 1,099,767 | 67,824 | 1,531,965 |
| Assam | 1854–5 | 25,378 | 527,731 | 41,430 | 878,401 | 1,950 | 56,483 | 2,800 | 83,638 |
| North-West Provinces | 1854–5 | * 3,920 | * 52,952 | 10,174 | 246,424 | 13,595 | 292,069 | 10,862 | 282,570 |
| Panjab | 1856–7 | 5,621 | 44,291 | † 6,125 | 139,039 | 8,423 | 195,409 | 9,408 | 260,227 |
| Central Provinces | 1862–3 | 1,169 | 21,353 | 1,949 | 83,999 | 1,430 | 81,212 | 1,988 | 117,483 |
| Berar | 1866–7 | 247 | 8,644 | 454 | 16,441 | 915 | 35,840 | 1,322 | 51,483 |
| TOTAL | 1855–6 | ‡ 50,998 | ‡ 923,780 | ‡ 83,052 | ‡ 1,894,823 | ¶ 94,989 | ¶ 2,451,989 | ¶ 141,793 | ¶ 3,856,821 |

* Excluding Oudh. † Figures for 1871–72. ‡ Excluding Ajmer, Bangalore and Burma.
¶ Excluding Ajmer, and including Burma and Bangalore.

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The progress made, irrespective of the territorial additions to the later columns, is very remarkable, and the attendance, it appears from the table, has grown faster than the establishment of institutions. The information, so far, lies on the face of the table, but to appreciate it duly it is necessary to distribute it over the different grades of educational establishments.

Public and Private Institutions.

The first main distinction is that between public and private institutions. The former includes every school or college in which the course of study conforms to the standard prescribed by the Department of Public Instruction or by the University, and which is either inspected by the Department or regularly presents pupils at the public examinations held by the Department or the University. A private institution is one not falling within the above definition. Subordinate to the definition of a public educational institution is the subdivision according to management, that is (1), State and Departmental Schools; (2) Municipal or local Board Schools; (3) Protected-State schools; and, finally, (4) Aided and unaided schools. The Departmental review shows that in 1881–82 there were 95,566 public schools with 2,979,904 pupils. Ten years later there are returned 102,676 of the former, with an attendance of 3,348,900. But on both occasions nearly half the number consists of aided lower primary schools in Bengal, the *status* and efficiency of which are very doubtful. Private schools are divided from these last by a very elastic partition. In 1881–82 the number was 26,800 with 345,200 pupils, or an average of 15 each. Ten years later they are found to have grown to 39,117 with an average of 13.

Grades of Instruction.

The most important subdivision of the institutions in question, however, is that according to the grade of their teaching. This must be effected for the public and the private sections separately, as the latter are not organised on a system that will allow joint grouping. The most general distribution of the public schools and colleges, then, is that shown in the margin for the first and last of the cycle under review. The comparison between the secondary and primary return of the two years cannot be accurately made, as there have been changes in classification in the interval which affect, to some extent, the distribution. The collegiate grade, it must be explained, includes instruction, first, in arts, and secondly, in the faculties of law, medicine, engineering, and teaching. The pupils must have passed from a secondary institution, through the door of the University entrance examination. The Universities of Calcutta, Madras, Bombay, and Allahabad, are primarily examining bodies, with, necessarily, the determination of the curriculum for such test. In the case of the Lahore University a teaching branch is added. The Allahabad University was added to the list from the year 1887. It has the power of granting degrees in science, medicine, and engineering, though at present it recognises only the faculties of arts and law. All the universities grant the degree of bachelor or master in the faculty of arts, and the Panjab adds that of doctor of literature, though no one has yet attained it through examination. The Bombay University grants the degree of bachelor of science, after a course which, except as regards the exclusion of English as a compulsory subject, corresponds with the scientific branch of the arts degree in Calcutta. In Lahore there is a faculty of oriental learning, which grants degrees of bachelor, master, or doctor, English being an optional subject at the examinations, which are conducted in the vernacular of the candidate. It also confers diplomas and oriental titles consequent on success in passing tests in Sanskrit, Arabic, and Persian. In the case of all the universities changes have been made in the course of studies and other matters during the decade, as dictated by experience. The most important were those in relation to the Panjab, where the novelty of the experiment in regard to oriental teaching and examination led to a good deal of controversy. In 1888–89, the results of the high percentage

| GRADE. | | 1881–82. | | 1891–92. | |
|---|---|---|---|---|---|
| | | No. | Pupils. | No. | Pupils. |
| University | Arts | 86 | 8,127 | 104 | 12,985 |
| University | Professional | 24 | 2,411 | 37 | 3,292 |
| Secondary | | 4,432 | 418,412 | 4,872 | 473,294 |
| Primary | | 90,700 | 2,537,502 | 97,109 | 2,837,607 |
| Normal | | 135 | 4,949 | 152 | 5,146 |
| Technical | | 189 | 8,503 | 402 | 16,586 |
| TOTAL | | 95,566 | 2,979,904 | 102,676 | 3,348,910 |

Universities.

percentage of marks demanded as a qualification, and the abnormal fluctuations in the standard of the papers set, attracted the attention of the Local Government. The former defect was subsequently remedied, but the latter had defied the efforts of the Senate up to the end of the period in question. The attendance, however, is still small, as only 1,445 candidates have passed the entrance examination in the Arts Section in the last five years, and only 161 have got their bachelor's degree. The entrances to the Oriental faculty have been 72 in the same period, and 19 have graduated in Oriental literature, and two have advanced to mastership in that faculty. The Allahabad University supplied a keener demand. The four years that have elapsed since its foundation showed 2,909 passes into the University, with 307 graduates and 40 Masters in Arts. As regards the older Universities, in Madras one of the more important changes was the prescription of attendance at a recognised high school for at least a year before the test. Modifications in the course and in the rules for affiliation of colleges were also effected. In Bombay the course in Arts was extended from three to four years, and History and Political Economy were added to the compulsory subjects. As an alternative to the entrance examination, but not leading up to the higher University tests, a "School Final" examination was introduced, for reasons that belong to another section of the subject. The Calcutta University also revised its course in Arts and the rules relating to affiliation. There are no less than 30 colleges practically affiliated to this centre, exclusive of 16 which are only privileged as far as the first examination in Arts. The subject of professional colleges can be more conveniently treated in connection with technical training. As regards the Oriental colleges, the Sanskrit institution at Benares has been separated from the Arts College, of which it was, till 1888, a department, and a revised course of study introduced. It is described as "the living teaching centre of the highest branches "of Brahmanic learning," and maintains its reputation for the high quality of its teaching and the value guaranteed by its diploma. Five years ago only seven pupils passed the final test; in 1891-92 the corresponding number was 48. It is worth mentioning, in connection with this college, that whilst the pandits engaged in tuition there have eagerly assimilated the teaching of Europe in the matter of mathematics and science generally, they adhere to their narrow groove of philological study, and refuse to admit the comparative method of modern criticism. The results are that, whereas the works on science issued from the institution of late are of considerable value and interest, linguistic studies have remained stationary and attract no notice, serving only to turn out school teachers for Bengal and other surrounding tracts. The Calcutta Sanskrit College has yielded to the demand for English teaching, and contained only 52 pupils on the Oriental side in 1892, and of these 12 were also studying for the university examinations. The Canning College at Lucknow may be called moribund. It has only 68 pupils, who contributed 28 rupees in fees. The curriculum includes the rudiments of Arabic, Persian, and Sanskrit, together with the most advanced studies in those tongues. The Oriental College at Lahore was the subject of an inquiry during the decade, which revealed the fact that all the pupils were in receipt of stipends except 46, who were expecting them, whilst the instruction was scarcely more than nominal. The institution was reorganised in 1887, and it is expected that by the change in teaching from the Oriental to the European system some efficient results will be ultimately obtained. At present, however, the change of system has reduced the students from 135 to 72, though probably the departures are not to be regretted from either a financial or a philological standpoint.

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The next grade of schools is that which is concerned with what is generally known as secondary education. Until within the last few years a very fair definition of its scope was the stage that leads from the primary to the collegiate course of study. This, however, is no longer universally applicable. In the first place, the upper limit is not, in several cases, the University entrance examination, which used to be not only the introduction to the collegiate, but also the final standard of the intermediate instruction. In Bombay, for instance, the University School final examination which does not lead up to the University, and which is more practical in its application than the matriculation, is an alternative, and there are other variations too in the

Secondary grade.

PUBLIC INSTRUCTION.

standard, all of which tend to render secondary study more a direct continuation of the primary course rather than to dissociate it from the practical requirements of the latter. The classification of the schools under this head has been materially altered in the last five years. To the distinction between English and vernacular is now added that of high school and second grade college. The latter teaches up to the first arts standard, the former up to the entrance only. Then, again, the practice of the different provinces varies considerably. In some, as in Madras, the North West Provinces and Bengal, and the Panjab, primary branches are found in nearly all secondary institutions, whilst in Bombay they are excluded, and registered as separate schools. There is thus no uniformity which would render comparison between provinces feasible, whilst the recent changes in classification make it very difficult to gauge the progress made in this class of school. The same remarks are applicable to the results of the examinations by which the efficiency of these institutions are annually tested. The English-teaching institutions are far more in demand than those where the vernacular is the main vehicle of instruction, but there is a tendency reported in some provinces for the district school to be used more and more by only the inhabitants of the town where it is situated, and to be deserted by pupils from the rural tracts. In any case, this grade of school shows great vitality and a rapid increase in the number of its pupils.

Primary Education

As regards elementary or primary instruction, we find it defined in India as that of the masses, through the vernacular languages, in such subjects as will best fit them for their position in life, and not necessarily regarded as a portion of instruction leading up to the University. The definition is not beyond objection, but it sufficiently gives prominence to the double aspect in which this stage of education has to be regarded: first, as the complete and only course for the masses of the population, and, second, in the case of a small minority, as a step in the pedagogic ladder. Some Provinces give the preference to one view, others to the alternative. In Bombay the whole of the early stage is uniformly regarded as a portion of the instruction which leads up to the University. In Bengal, on the other hand, this function is relegated to the primary classes of a high school, and the elementary school proper aims at teaching the elements of reading and writing, with such an acquaintance with arithmetic and mensuration as will enable the peasant to look after his own interests. The Madras system steers a middle course by adopting a uniform curriculum but with a plentiful array of optional subjects. In all the Provinces the upper limit of primary instruction is practically almost the same, and as the large majority of the pupils are found in the lower section, the slight want of uniformity is not of much importance. The great discrepancy in the provincial returns is with regard to the practice above mentioned of combining the two stages of instruction in one institution, the latter being classed as secondary. Then, again, in comparing one year with another, the great fluctuations that are apparent must be attributed to purely local causes. These are remarkably prominent in Bengal, where the great proportion of the institutions are of very small dimensions. Half the schools there of this class contain less than 20 pupils, and, taking the country as a whole, the attendance is less than half that returned against the State or Board schools. A slight deficiency in the remuneration, therefore, turns the hedge-schoolmaster aside to seek employment more lucrative than the small earnings he can acquire by tuition. In the North-West Provinces, again, a decrease is attributed, first, to the increased demands on the family resources that follow the taste for a higher standard of living, and which lead to the curtailment of superfluous luxuries, of which education is, amongst the rustic population, undoubtedly one of the most prominent; and, secondly, to the experience of the deterioration in physical vigour of an agriculturist boy who has prolonged his school years to the unwonted age of 14 or 15 years. As regards provision and management, it appears that a large majority of the schools under departmental control are those of local Boards. Municipal and State institutions of this grade are comparatively few. More than half the pupils on the return are found in aided institutions. These comprise not only those subsidized by boards and municipalities or helped from provincial funds, but the so-called "indigenous" schools which have adopted departmental rules and standards, and the more efficient and better organised schools under the supervision of Christian

Christian missionaries. The system of recognition of elementary private schools is highly developed in Madras, where it is considered the basis of the arrangements for the diffusion of primary instruction. Much progress is reported from Sindh, where the local Kuran schools are being gradually weaned from their traditional and inefficient methods into the adoption of text-books and other improvements. In Bengal, the bulk of such schools does not appear to be worth its maintenance, and, as the reporting officer remarks, hundreds, even thousands, are every year set up, totter on feebly for a few months and disappear, leaving no trace. It is still worse in the case of the schools of this sort which are beyond the sweep of the departmental net. These are numerous in several provinces, and in the majority of them no attempt is made to teach anything beyond the sacred text, usually by rote, and without translation of the words repeated. In the Panjab, the establishment of a class of such pupils is often the last resort of those who are incapacitated from other employment, and many, even, are totally blind, but can repeat their Kuran by heart. The outcome of a perusal of the various provincial reports on this class must be the recognition of the entire want of connection between the statistics and the actual position and work of such schools. The number of institutions and pupils swells the annual tables, and does little more. In place of being buds, it has been said, which need nothing but care to bring them to a rich maturity, they ought to be considered stocks, the fruit of which cannot be improved, but must be superseded by grafts from a totally different species. There are, it is needless to say, exceptions which rise far above the ruck, and these, more often than not, are absorbed before long into the departmental system, and receive grants from public or local funds, to an extent sufficient to enable them to establish themselves firmly on an efficient as well as popular basis. Public Instruction.

This general description of the scholastic distribution of India must conclude with a brief account of the institutions which bear a more special character than the greater portion of those which have been mentioned above. We may treat of these under the three divisions of normal or training institutions, professional colleges and schools, and technical institutions. The first is divided into three grades, like the ordinary schools and colleges. In the highest, English is the vehicle of instruction. In the secondary training schools the vernacular is used, except in a few establishments in Madras. The primary schools for this purpose vary greatly in the scope of the instruction they set forth. Below these, again, are the special classes established in Bengal in 1885, the lower-primary schools, and the Sessional schools in Madras, which seem to be establishments for the preparation of those who aspire to enter a training school. Pupil-teachers, also, are more largely employed in some provinces than in others. Three of the 116 male teachers are of the collegiate class, in Lahore, Madras, and Nagpur respectively. The distinction between the middle and primary was not well drawn in the early years of the decade; but in 1891–92 there were 49 schools of the one, and 25 of the other class. The number of pupils was 4,413, of whom a remarkably high proportion, 584, was learning English, and, in the aided institutions, the proportion of native Christian converts is also noteworthy. The training of teachers has special importance in the present time when, as the Government of India has observed, there is reason to insist on the maintenance of a stricter system of discipline than has been in force of recent years. Of the 37 corresponding institutions for training school-mistresses, several are no more than primary or middle schools with a few adult pupils. In Bengal the whole ten are under Christian missionary management receiving grants-in-aid from the State. Of the 793 pupils, no less than 448 were native Christian converts, as it is found that with the exception of this class, few women of standing and education can be obtained who are willing to devote their lives to instruction. Normal Institutions.

The institutions serving as an introduction to the three professions of law, medicine, and engineering, are also divided into colleges and schools. Of the first-named there were in 1891–92, 27 colleges and two law schools, both the latter being in Assam. On the whole, the collegiate course in law comes next to the faculty of arts in popularity. It is peculiarly in harmony with the clerical and sedentary habits of the literate classes, and involves neither physical labour, like engineering, nor the tampering with strange and possibly caste-polluting Professional Institutions.

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polluting substances, like medicine and surgery. It is not surprising, accordingly, to find 1,932 students of this profession, against 778 in the four colleges in the faculty of medicine, and 454 in the same number in that of engineering and surveying. On the other hand, if we look a grade lower, the 19 medical schools contain 1,988 pupils, or more than the 27 law colleges. The engineering institutions of the lower grade, also, jumped from 310 pupils in 1881-82 to 1,042 ten years later. The standard of qualification is necessarily lower and so is the position in the profession taken by those who limit their training to this grade of institution. As regards the outturn from the colleges, it appears that in the last five years 1,293 bachelors of law issued, of whom no less than 855 were from the Bengal establishments. In the same period 298 men and 8 women were successful at the examination for licentiate of medicine and surgery, 44 men and 3 women obtained their bachelor's degree in the same faculty, and only 5 in all arrived at the doctor's degree. Bombay takes the lead in numbers, though there is a falling-off there as compared with the results five years back. The local medical college authorities have given their opinion that the profession is overstocked in the capital city. There does not appear either any strong tendency on the part of graduates to strike out new practice for themselves in the rural tracts, either here or in other provinces. It has been stated above that several women have, during the last few years, obtained degrees in medicine. In this respect Madras was the pioneer province, and since 1883 both Calcutta and Bombay have followed its example, and thrown open their degrees to both sexes. The sphere of usefulness in this line that lies before duly qualified women practitioners is probably wider than in any other branch of life. Civil engineering received its chief stimulus during the decade by the offer, in 1884, of a certain number of State appointments in the Department of Public Works to certificated students of the Roorkee, Poona, Sibpore, and Madras Colleges. In Bengal, too, it was ruled that the post of district engineer under Road Cess Committee should be reserved for qualified students of the Sibpore College, the curriculum of which was considerably modified in 1887, and special prominence given to practical training in workshops and on public undertakings.

Technical training.

The subject of technical and industrial education has received unusual attention in India during the last six or seven years, and the start made since 1886 has been apparently well maintained. Up to that date but little had been done except at the four or five schools of Art, and there only on a curriculum which was necessarily very narrow compared to the requirements of the country. The tendency of State education was almost exclusively in the direction of literary culture, and little or nothing was being undertaken to fit boys specially for industrial or commercial life. In the Despatch of 1854 this tendency seems to have been foreseen as likely to happen. Indeed, no observer of the social conditions of India at that time, or since, could have failed to perceive the direction which the bias of State instruction must inevitably take. The Despatch enjoined that "useful and practical knowledge suited to every station in life should be conveyed to the great mass of the people." As a first step in this direction, it was recommended in the year above mentioned that efforts should be made to promote the elementary knowledge of science, and to cultivate the faculty of observing and reasoning from observation and experiment. Technical education, therefore, on the above lines is an extension of the general system of public instruction to which the support of the State can legitimately be lent with the prospect of attaining the desired end. But the problem with regard to specialised instruction of this class is of an altogether different character. To dilate upon the importance of the development of industrial enterprise in India as a means of diverting a larger proportion of the energies of its working population from the land would be merely to reiterate what has been already sufficiently set forth in connection with agriculture, whilst in the remarks on mines and factories it was shown, again, how slow must be the progress of such undertakings in a country so poorly furnished, in comparison with many others, with the raw material for starting and maintaining industry on a large scale. But education of the character in question is, practically, the supplement and auxiliary of enterprise of that sort, and, though there is a fair prospect of a gradually increasing demand in India for trained skill

skill and experience in those directions, the rate of progress is likely to be slow, so that it is out of the question, as a matter of administrative prudence, to start a system which will only end in the erection of a superfluous educated proletariat, with the same characteristics and aims as that with which, as the result of superabundant literary instruction, the State is already sufficiently embarrassed. In the cities which are at present centres of special industries the co-operation of the managers of large workshops or factories can be secured, and there a small body of men practically trained would be in demand. This, then, is the field for technical instruction which is at present being occupied, and in every province steps have been taken in the last five years, either to provide for special, or more frequently for preparatory, education on the lines above sketched. The schemes drawn up are fully described in the quinquennial review of 1891–92, but the detail is such as to place the subject beyond the scope of the present work. The general progress, so far as it can be gauged by statistics, is shown in the marginal statement. The Agricultural College, it may be mentioned, is at Madras, but instruction in this all-important subject is given on scientific principles at other places of higher education, such as the College of Science in Poona, and there are numerous elementary classes scattered about the provinces in which the rudiments of chemistry and treatment of soil can be picked up. The great difficulty in such cases is too often the enlistment of the class who would be most benefited by the course of training. If the certificate of qualification be constituted to any extent a passport to the employment of the State in one of the great Departments, such as that of Land Revenue and Agriculture, there is a risk of the whole class being swamped by youths of the literate castes, who, on obtaining through these means the coveted appointment, would throw behind them their agricultural knowledge, along with that of history and geography, which they acquired in the early days of their primary course of instruction.

| Class of Institution. | 1881–82. | | 1886–87. | | 1891–92. | |
|---|---|---|---|---|---|---|
| | No. | Pupils. | No. | Pupils. | No. | Pupils. |
| Schools of Art | 5 | 439 | 4 | 763 | 6 | 1,048 |
| Industrial Schools | 44 | 1,509 | 68 | 3,030 | 69 | 3,860 |
| Agricultural College | – | – | – | – | 1 | 45 |
| Total | 49 | 1,948 | 72 | 3,793 | 76 | 4,953 |

Such, in outline, is the general distribution of the course of instruction initiated, controlled, or supervised by the State in India. The next stand-point from which it has to be considered is that of statistics. In dealing with a subject of this sort the mere figures by which it is represented are, it must be confessed, little more than dry bones, into which it takes the knowledge and sympathy of an expert to impart life and interest. The skeleton, however, is ready before us, and must be used accordingly for demonstration. The following table gives the distribution of the different classes and grades of educational institutions, with the pupils attending each at the end of the first and of the last years of the period we are reviewing. In the case of the latter the sexes are distinguished, but the corresponding figures, in their full detail, are not at hand for the earlier year, nor, again, are those for private institutions. It must be pointed out that, as regards the sex distribution, due notice is taken of the numbers of one sex attending the schools or colleges primarily established for the other. This distinction is of importance in regard to both elementary and secondary institutions.

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## GENERAL STATEMENT of the Distribution of Institutions and Pupils.

| GRADE, &c. | 1891–92. | | | | 1881–82. | |
|---|---|---|---|---|---|---|
| | Institutions. | Pupils. | | | Institutions. | Pupils. |
| | | Boys. | Girls. | TOTAL. | | |
| **A.—PUBLIC SCHOOLS, &c.:** | | | | | | |
| **I. COLLEGIATE:** | | | | | | |
| Arts — English | 100 | 12,379 | 45 | 12,424 | 63 | 5,442 |
| Arts — Oriental | 4 | 561 | — | 561 | 4 | 595 |
| Professional — Law | 27 | 1,925 | — | 1,925 | 12 | 739 |
| Professional — Medicine | 4 | 749 | 29 | 778 | 3 | 476 |
| Professional — Engineering | 4 | 484 | — | 484 | 3 | 330 |
| Professional — Teaching | 1 | 58 | 2 | 60 | 1 | 44 |
| Professional — Agriculture | 1 | 45 | — | 45 | — | — |
| TOTAL COLLEGIATE | 141 | 16,201 | 76 | 16,277 | 86 | 7,626 |
| **II. SECONDARY:** | | | | | | |
| Boys — High | 755 | 164,297 | 396 | 164,693 | 2,134 | 149,265 |
| Boys — Middle — English | 1,789 | 135,180 | 2,146 | 137,326 | | |
| Boys — Middle — Vernacular | 1,894 | 135,823 | 1,146 | 136,969 | 1,798 | 66,466 |
| Girls — High | 76 | 704 | 7,066 | 7,770 | 146 | 5,636 |
| Girls — Middle — English | 157 | 1,650 | 9,396 | 11,046 | | |
| Girls — Middle — Vernacular | 201 | 398 | 15,092 | 15,490 | 44 | 730 |
| TOTAL SECONDARY | 4,872 | 438,052 | 35,242 | 473,294 | 4,122 | 222,097 |
| **III. PRIMARY:** | | | | | | |
| Boys | 91,881 | 2,560,576 | 119,848 | 2,680,424 | 83,591 | 2,070,963 |
| Girls | 5,228 | 6,229 | 150,954 | 157,183 | 2,678 | 85,279 |
| TOTAL PRIMARY | 97,109 | 2,566,805 | 270,802 | 2,837,607 | 86,269 | 2,156,242 |
| **IV. TECHNICAL, &c.:** | | | | | | |
| Law Schools | 2 | 39 | — | 39 | — | — |
| Medical Schools | 19 | 1,901 | 87 | 1,988 | 11 | 830 |
| Engineering Schools | 24 | 1,042 | — | 1,042 | 9 | 310 |
| Industrial Schools | 69 | 3,860 | — | 3,860 | 44 | 1,509 |
| Other Schools | 282 | 8,286 | 323 | 8,609 | 56 | 1,980 |
| Schools of Art | 6 | 997 | 51 | 1,048 | 5 | 439 |
| TOTAL TECHNICAL | 402 | 16,125 | 461 | 16,586 | 125 | 5,068 |
| **V. NORMAL:** | | | | | | |
| For Masters | 115 | 4,319 | 34 | 4,353 | 96 | 3,519 |
| „ Mistresses | 37 | 8 | 785 | 793 | 16 | 519 |
| TOTAL NORMAL | 152 | 4,327 | 819 | 5,146 | 112 | 4,038 |
| TOTAL PUBLIC INSTITUTIONS | 102,676 | 3,041,510 | 307,400 | 3,348,910 | 90,714 | 2,395,071 |

GENERAL STATEMENT of the Distribution of Institutions and Pupils—*continued.*

| GRADE, &c | 1891-92. | | | | 1881-82. | |
|---|---|---|---|---|---|---|
| | Institutions. | Pupils. | | | Institutions. | Pupils. |
| | | Boys. | Girls. | TOTAL. | | |
| B.—PRIVATE INSTITUTIONS. | | | | | | |
| I. ADVANCED: | | | | | | |
| Arabic and Persian | 3,088 | 39,240 | 294 | 39,534 | — | — |
| Sanskrit | 2,427 | 28,796 | 37 | 28,833 | — | — |
| Other Oriental Classics | 44 | 660 | 24 | 684 | — | — |
| TOTAL ADVANCED | 5,559 | 68,696 | 355 | 69,051 | — | — |
| II. ELEMENTARY: | | | | | | |
| Boys — Vernacular | 19,235 | 239,441 | 5,048 | 244,489 | — | — |
| Boys — Kuran | 12,560 | 147,719 | 12,036 | 159,755 | — | — |
| Boys — Others | 721 | 19,468 | 1,226 | 20,694 | — | — |
| Girls — Vernacular | 269 | 227 | 4,206 | 4,433 | — | — |
| Girls — Kuran | 668 | 706 | 7,411 | 8,117 | — | — |
| Girls — Others | 105 | 11 | 1,361 | 1,372 | — | — |
| TOTAL ELEMENTARY | 33,558 | 407,572 | 31,288 | 438,860 | — | — |
| TOTAL PRIVATE INSTITUTIONS | 39,117 | 476,268 | 31,643 | 507,911 | — | — |
| GRAND TOTAL | 141,793 | 3,517,778 | 339,043 | 3,856,821 | — | — |

Enough has been said above in respect to the occasional confusion between the middle and the lower grades to render it unnecessary to further explain how the lower grade of secondary schools includes a considerable number of pupils in the primary stage, and the actual distribution by standard is the subject of a separate table later on. The figures now in question show the general distribution proportionately stated, and the comparison of the chief grades with the corresponding return for 1881–82. Private schools have been excluded from the calculation, because the great increase of late years in their prominence in the returns has been due merely to their recognition by the local authorities, not to their actual expansion in either number or attendance. About 95 per cent. of the public institutions are still in the primary grade, though the proportion is decreasing. As many of them are attended by a very small number of pupils, the distribution of the latter is very different, and indicates the larger size of the secondary institutions and colleges. The exclusion of girls from the calculation, again, tends to throw into a little more importance the higher grades. The last columns of the statement contain the figures of variation during the decade. The attendance has apparently increased at a far higher

| | Distribution of Pupils. | | | Distribution of Institutions. | | Percentage of Increase in 1891-92. | |
|---|---|---|---|---|---|---|---|
| | 1881-82. | 1891-92. | | 1881-82. | 1891-92. | Institutions. | Pupils. |
| | | Total. | Males only. | | | | |
| Collegiate | 3 | 5 | 5* | 1 | 1* | 64 | 113 |
| Secondary | 93 | 141 | 144 | 45* | 47 | 18 | 113 |
| Primary | 900 | 848 | 844 | 951 | 946 | 12 | 31 |
| Technical | 2 | 5 | 5* | 1 | 4 | 221 | 227 |
| Normal | 2 | 1 | 1 | 1 | 1 | 35 | 27 |

* Fractions omitted.

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higher rate than the number of schools, except in the case of the normal or training institutions. The most marked instance is that of the secondary group. The inclusion of Upper Burma has comparatively little effect on the general results, as the bulk of the educational institutions there are independent of the State, and do not appear in the return.

In order to show the class of instruction and how it is distributed, the figures are thrown into the form shown below, to which, however, the returns for 1881–82 do not adapt themselves, so a later year has had to be selected. The

| GRADE. | 1885–86. | | 1891–92. | | Percentage Distribution. | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Boys. | | Girls. | |
| | Boys. | Girls. | Boys. | Girls. | 1885–86. | 1891–92. | 1885–86. | 1891–92. |
| Colleges { Arts | 8,119 | 8 | 12,940 | 45 | – | – | – | – |
| Colleges { Professional | 2,384 | 27 | 3,261 | 31 | – | – | – | – |
| High | 35,290 | 375 | 57,462 | 926 | 1 | 2 | – | – |
| Middle | 109,993 | 4,348 | 125,014 | 6,105 | 4 | 4 | 2 | 2 |
| Upper Primary | 321,052 | 15,641 | 343,734 | 19,920 | 12 | 11 | 6 | 6 |
| Lower Primary { (a) Reading | 1,567,944 | 132,023 | 1,819,889 | 178,477 | 57 | 60 | 57 | 58 |
| Lower Primary { (b) Not Reading | 691,804 | 77,444 | 658,758 | 100,616 | 25 | 22 | 34 | 32 |
| Technical | 8,269 | 234 | 16,125 | 461 | – | – | – | – |
| Normal | 4,289 | 660 | 4,327 | 819 | – | – | – | – |
| TOTAL | 2,749,144 | 230,760 | 3,041,510 | 307,400 | 100 | 100 | 100 | 100 |

most prominent fact that appears in this table is that from 93 to 94 per cent. of the boys, and 96 or 97 per cent. of the girls on the school register are in the primary stage, and that between a fifth and a quarter of the one, and about a third of the other sex are still "below standard," or not reading printed books. About two boys in every hundred at school reaches the high standard, and about the same proportion of the girls arrive at the stage below this. About four boys in every thousand registered as attending educational establishments were at some college or other, arts, by preference. Five years ago only three had got thus far in the course of instruction. The high schools, too, show just under 20, where they showed 14 in 1886–87. The improvement in the higher branch of the lower primary stage is only nominal, so far as these figures are concerned, because the recent introduction of regular standards into Lower Burma displaced the blackened slips of lacquered board and the steatite pencil, in favour of a series of printed primers. These figures relate to the boys only. The girls show a considerably better tendency towards collegiate study, though it can scarcely at present be measured in a selection of a thousand pupils only. The lower stages, too, appear to be on the move upwards, and relatively more are in primers than there were five years ago. But so far as the general variation in the attendance is in question, it will be seen that though the rise has been general, it averages amongst the boys 62 per cent. in the high schools, and only 7 and 16 per cent. respectively in the upper primary and the "reading" branch of the lower. That is, the progress is considerably more amongst the classes that take advantage of the facilities for secondary education than in the direction where it is most wanted, namely, amongst the masses. The same feature was prominent in the table given earlier in this chapter, and, so far as it is not due to change of system or classification, is full of significance.

School Examinations.

Whilst engaged with this portion of the subject, it is not out of place to quote a few figures from another return which deals with the test of the results of school and college teaching. There is a great deal of difference, as might be expected, between the provinces in respect to the method of testing the annual work of these institutions by periodical examinations, and even the universities have their varying standards. But, speaking generally, primary instruction is tested at the end of the third and the fifth years, or within a difference of a year from that interval. The public service certificate or middle

middle class examination is made as uniform throughout the province as possible, and in the Panjab seems to have been entrusted to the University, with results not altogether satisfactory, even apart from violent fluctuations in the standard. This examination is intended to close the middle-class stage, just as the University entrance examination crowns that passed in the high schools. It lacks, however, the steadiness and comparative uniformity of the latter, as it is not, as a rule, open to only one section of pupils, but is undergone by boys from middle-class schools as well as the classes of high schools supposed to imply equivalent studies. The qualification, therefore, under it "does not imply identical or even similar acquirements in different provinces," nor does it indicate with any near approach to accuracy the number of pupils who have reached the stage supposed to be completed by it. This will appear from a comparison of the figures given in the margin with those of the total number of pupils in each grade of public schools. The matriculation figures, it may be observed, do not include private students, or those from other than public schools. The proportion sent up is here very fair considering the relatively small numbers in the high schools. The same may be said of the upper primary test, which also shows the most efficient preparation of the candidates. The lower primary falls low, in comparison with the number in the schools to which it relates, and the proportion indicates, probably, the small number of boys in the second or third year course who are considered prepared for the test. In considering the above proportion, the non-reading pupils are necessarily omitted from the calculation. As regards girls, it appears that even in the secondary schools, 66 per cent. of the pupils are in the lower, and 15 more in the upper primary branches, leaving 17 per cent. in the middle, and two in the high schools. Though the proportion sent for examination was not high, that of the successful was generally higher than amongst the boys.

PUBLIC INSTRUCTION.

| Examination (Boys). | Appeared, 1891-92. | Percentage Successful. |
|---|---|---|
| Matriculation - - - | 14,244 | 40 |
| Upper Secondary - - - | 1,355 | 28 |
| Middle School - - - | 24,385 | 49 |
| Public Service Certificate - | 4,869 | 33 |
| Upper Primary - - - | 99,449 | 61 |
| Lower „ - - - | 176,757 | 59 |

| Examination (Girls). | Examined. | Passed. |
|---|---|---|
| Matriculation - - - | 195 | 97 |
| Middle - - - - - | 500 | 303 |
| Upper Primary - - - | 2,797 | 1,842 |
| Lower „ - - - | 11,873 | 7,020 |

The working of the universities in this respect now requires comment. Experience has shown that the entrance test was too often used, not with the view of entering upon the University course, but as a certificate of the satisfactory completion of the high school course, and a qualification, therefore, of fitness for employment under the State. It was to relieve the University of the superfluous trouble of examining so many candidates, but a fraction of whom had any intention of continuing their studies under its auspices, that in Bombay the Local Government University got rid of the extra crowd by establishing the separate test which was mentioned in an earlier portion of this chapter. The marginal figures will serve to illustrate the above remark regarding the disappearance from the universities of the majority of passed candidates as soon as they have got over that test. In the Departmental review for the last quinquennial period it is stated that roughly speaking about one in five of the above class proceeds to a degree, instead of three in five, which is estimated to be the corresponding proportion in an English University. Omitting Allahabad and Lahore, which

UNIVERSITY EXAMINATIONS.

| University. | Matriculation. | | Intermediate Examination. | Bachelor of Arts. | Master of Arts. |
|---|---|---|---|---|---|
| | Candidates. | Passed. | Passed. | Passed. | Passed. |
| Calcutta - - - | 27,612 | 11,022 | 3,810 | 1,592 | 266 |
| Madras - - - | 36,467 | 9,457 | 4,236 | 1,211 | 21 |
| Bombay - - - | 15,352 | 4,143 | 1,740 | 492† | 18 |
| Allahabad - - | 6,718* | 2,909 | 810 | 355 | 58 |
| Lahore - - - | ,602 | 1,859 | 472 | 153 | 9 |
| TOTAL - - - | 90,751 | 29,390 | 11,068 | 3,803 | 372 |
| *Annual Average* - | *18,150* | *5,878* | *2,213* | *761* | *54* |

* Four years only. † Excluding 10 Bachelors of Science.

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which are still in their infancy, the tendency to use the entrance examination as the end all and be all of study is most marked in Bengal, where only 11 per cent. of those successful at the entrance examination took a degree in Arts, a faculty which is selected as the most popular in all three universities. In Bombay the corresponding proportion was 12, and in Madras nearly 13. The marginal table shows the variation in the proportion of candidates who pass the entrance test. The newer universities share with Calcutta the first place, though the irregularity of the results is far less marked in the latter than in the Panjab. This is seen by taking the percentage of the mean difference of each year from the five years' average. In the case of Bombay the result is only 5 per cent. Madras shows $11\frac{1}{2}$, Allahabad 13, Calcutta 16, and Lahore $22\frac{1}{2}$. The variation in each university as well as in the total, where it ranges between 28 and $41\frac{1}{2}$ per cent., is far too wide to be accounted for by differences in the quality of the work in the schools that undertake the functions of feeders to the Universities. To take a well-marked example, it appears that the percentage of passes at Calcutta in 1886-87 rose to $66\frac{1}{3}$, owing to a lowered standard. Two years afterwards, under this encouragement, a flock of hopeful weaklings presented themselves, only to bring down the proportion to 25. The weeding process preliminary to selection was then resumed, and the ratio hopped up to 50. Thus, here again, though there is probably far less change than in the case of lower examinations, the guarantee of the intellectual qualifications of the passed candidate is by no means constant in its value. Unfortunately, too, the light in which the Indian student of this class, who looks to his certificate as the foundation of his fortune in life, regards the examination, is scarcely encouraging to those who wish to render the guarantee an efficient one. The Government of India reviewer quotes instances of various descriptions of fraud in connection with these tests, with the remark that, as they only came to light by the merest accident, it is highly probable that they are but a fraction of those that escape undetected. Detected personation, forged certificates, theft of examination papers, and so on, are incidents of annual, if not more frequent, occurrence in one or other of the Universities, and where such a feeling prevails amongst those brought up at the higher grades of educational establishments, the remarkable instances of fraud on the State which are officially recorded as being committed by the hedge-schoolmaster, as he is found in Bengal, where he finds the soil most congenial, are scarcely calculated to excite astonishment. The college examinations are, necessarily, on a surer basis. Better supervision of the smaller numbers involved, the concentration of the examination and the training for it into fewer hands, and, it is always hoped, the higher type of candidate that presents himself, eliminate most of the defects above-mentioned, leaving only the almost inevitable one of liability to change of standard.

| University. | Calcutta. | Madras. | Bombay. | Allahabad | Lahore. |
|---|---|---|---|---|---|
| 1887-88 | 44 | 29 | 27 | - | 23 |
| 1888-89 | 25 | 25 | 26 | 54 | 37 |
| 1889-90 | 50 | 22 | 26 | 45 | 45 |
| 1890-91 | 43 | 23 | 25 | 37 | 38 |
| 1891-92 | 39 | 30 | 30 | 40 | 58 |
| Mean | 40 | 26 | 27 | 43 | 40 |

Relation of Pupils to the General Population.

But when we come to look back at the figures already exhibited in the course of this chapter, great as the improvement has been of late years in the attendance and system, especially in the higher grades of general education, it must be confessed that the effective demand for instruction still falls far below the requirements of civilised life. We find an average number of pupils on the register amounting to 3,634,200 during the last five years, including those in private institutions, where the instruction is, to a great extent, little more than nominal. Of the three millions odd in public schools and colleges only six in every hundred get above the primary stage, and less than that number in every thousand advances as far as university teaching. About 18,000, including private students, have appeared for the entrance test during the above period, and of these 5,900, or a little under a third, have succeeded in passing it. Less than 38 per cent. of this number, again, proceeded to the first examination in arts, and the average annual number of graduates has been shown to be about 815 in that faculty, to which must be added 590 in other faculties,

faculties, chiefly Law and Medicine, or in all a net total of 1,420 per annum. Nevertheless, 11 per cent. of the pupils in public institutions are returned as studying English. Such is the distribution of the portion of the community undergoing instruction, and it is now time to consider the relation of the latter to the population at large. We have two sets of returns bearing on this point; first, those of the Department of Public Instruction, which have been made the groundwork of the foregoing remarks; secondly, those of the Census. Each have their respective merits and defects, the latter of which, it must be mentioned in justice to the statistical probity of the compilers of both, have not been in any way concealed or placed in the background of the analysis to which they have been severally subjected. In the first place, the area covered by the two is not identical. The private schools outside the Departmental connection are included in the census, but the latter required the return of such pupils only as were learning to read and write, and, as has been seen above, a large proportion of the private school instruction does not extend to those acquirements. Then, again, the census distinguished in its instructions between the persons who could read and write, but were not under instruction, and those who, though they possessed those accomplishments, were still in a state of pupilage, but experience showed that this provision was very largely disregarded. In dealing with the returns, therefore, the community was divided simply into those who could, and those who could not, read and write. There are several other, chiefly local, defects in the returns, into which it is not the place to enter. But the main difference between the two series lies, beyond a doubt, in the deficiency of the Census, as compared with the Departmental figures, in regard to the lower grade of schools. As to Bengal, where the latter exceed the former by nearly half a million boys, the description given in a former part of this chapter shows that the speculative type of pedagogue is peculiarly the product of that Province. The annual reports teem with incidents illustrative of his wiles to secure a share of the local assignment in aid of popular instruction. Some of these have been extracted in the Provincial census review, and may be quoted in support of the probability of the excess in question being merely nominal. The practice of one of these masters obliging another with the loan of his classes for the purpose of the annual inspection, is reported from the very centre of the Province. In an outlying tract it is stated that for one detected case a dozen probably pass unnoticed. Elsewhere, a District Board practically abolished the system of annual rewards, on the ground that it "encouraged fraudulent practices." In three divisions, masters were prosecuted in one year for presenting fictitious pupils at the central examinations. One operator on a bold system reaped his reward in one village, and then transferred himself and his school to the adjacent district, in time to be inspected and rewarded there also. The prosecutions in question are set forth as the main reason for the remarkable decline in the Departmental return for that year, since the rest of the fraternity "got alarmed, and declined to submit returns at all." In the Madras district of Ganjam, which is so close to Orissa that it may possibly be under the same educational influences, the number of pupils departmentally returned, brings a notoriously backward tract into line with the equally notorious centres of education in the south and west of the Presidency.*

For our present purpose, however, which is that of showing how far instruction has permeated the population of India, we may omit from the question on the one hand the accuracy of returns which, after all, largely relate to pupils below a recognised elementary standard, and on the other, that is, on the part of the census, we may combine the two heads of those under instruction and those who can read and write, but are no longer in that stage. The result should be to show the cumulative effect of educational enterprise in the country, and to some extent, no doubt, it has been attained. Taking the country as a whole, that is, the population which made the return in both 1881 and 1891, amounting to about 250 millions in the latter year, we

* Bengal alone has been mentioned here, as it is the Province where the hedge-school is most prominent. There are doubtless corresponding cases to be found elsewhere. Indeed, in one Province the tradition still lingers of the enlistment of a group of specially selected pupils to precede the Lieutenant Governor's camp, so as to be ready for his visit to each village school.

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we find in every thousand males of all ages 896 who are illiterate, and in the same number of females, 995. The progress made in the decade has been shown above to have been rapid, and in every way satisfactory; but, taken as we are now taking it, not independently, but in its relation to the field it has to cultivate, it amounts to this: that in 1891, 104 males in every thousand were not unable to read and write, whereas in 1881 the corresponding number was 91. As to the women, where there were four in a thousand, there are now five in the above stage of literary acquirement. In the British Provinces, as a whole, not taking into consideration the identity of the area with that enumerated in 1881, 111 males and 6 of the other sex are returned in the category mentioned above, so that the progress is there rather more marked than is implied by the figures first quoted. An attempt has been made in the educational review to establish the relation between the school-going population and that of school-going age. The assumption is that the latter constitute 15 per cent. of the whole, on the grounds that half the population between five and fifteen years old, which is about $12\frac{1}{4}$ per cent. of the whole, represents the number that might reasonably be expected to be in a position to go through the five years' course of primary instruction, and that $2\frac{3}{4}$ per cent. is a full allowance for the class that extend their studies to the secondary and higher stages. The computation results in showing that the Sikhs stand at the bottom of the list, with 9·4 per cent., and, omitting the small communities of the Parsis, Brahmos, and Jews, to whom the age-limit above quoted evidently is inapplicable, and the Europeans and Eurasians, the native Christian converts, with 49·3, are at the top. The Census figures go no further than omitting the first five years of life, and taking the ratio to the remainder, a process which brings out the other than illiterate at 130 males and 7 females per hundred. The marginal table, which is thus constructed, shows plainly the variety in different parts of India in this respect, a matter which has not yet been introduced into this chapter. Madras and Coorg head the list in India proper, but the difference between Burma and the rest of the country is more strikingly brought out in this return than in that of the Department of Public Instruction, where the Monastery School is but occasionally recognised. Bombay comes next to Madras, both as to male and female instruction. Bengal, Oudh, the Central Provinces, and Berar all lag, so far as the fair sex is concerned. But it is not necessary to dwell upon the education of that sex in this review. The Departmental figures show that the progress made in the decade has been proportionately equal to, and, as a rule, higher than that amongst boys at school; though we have seen that there is little spread beyond the lower primary stage, except with regard to medical training, where the opening is wide and the opportunities of beneficent distinction many and great. But so far as the masses of the weaker sex are concerned, the crust of literary ignorance has hardly been indented, and a very high proportion of the girls at school is less than 7 years of age, and that over 10 years is scarcely significant except amongst the Parsis and other special classes. The question is a long and involved one, and the difficulties to be overcome are many times greater than those involved in conquering the prejudices operative against the diffusion of instruction amongst the other section of the community. Amongst the domiciled foreigners and those connected with them, that is, the Parsis, Jews, Eurasians, and native Christian converts, education is making its way at quite a normal rate; but, taking the population as a whole, to every 1,000 males who can read and write, there are only 47 of the other sex who can vie with them in that degree of education.

| PROVINCE. | Percentage over Five Years Old not Illiterate. | |
|---|---|---|
| | Males. | Females. |
| Madras | 17·5 | 1·2 |
| Bombay | 16·3 | 1·2 |
| Sindh | 10·0 | 0·6 |
| Bengal | 9·7 | 0·2 |
| North West Provinces | 7·3 | 0·3 |
| Oudh | 6·7 | 0·2 |
| Panjab | 8·9 | 0·3 |
| Central Provinces | 6·6 | 0·2 |
| Berar | 9·7 | 0·2 |
| Coorg | 17·5 | 2·0 |
| Ajmer | 15·4 | 0·9 |
| Assam | 8·9 | 0·4 |
| Lower Burma | 51·0 | 4·5 |
| Upper Burma | 53·3 | 1·8 |
| TOTAL | 13·0 | 0·7 |

MALE EDUCATION BY CASTE, &c.

We may, therefore, resume the main point under discussion with reference to the males only. In order to duly appreciate the extent of the filtration of education through the population, it is necessary to break up the latter into its chief component parts. For this purpose we must abandon the Departmental returns and take our stand on those furnished by the Census. Whatever may be

be the value of these as a whole, in comparison with the larger figures found on the records of the former source of information, there is no other means of testing the relative prevalence of instruction amongst the sub-divisions of the people, where the return is probably accurate, or, at all events, it is not restricted to the meaningless generalities implied by the use of such terms as Hindu, Musalman, and the like. We find, then, that literacy, if the term be admissible, is restricted to a very small section of the community. Sixty per cent. of the males who are not illiterate are found in less than 19 per cent. of the population, comprising only twenty different communities out of the hundreds of India. The process of elimination must be carried further, for in these twenty come not only $12\frac{1}{2}$ per cent. of Burmans, who are under a different system of instruction, but $1\frac{1}{3}$ per cent. of foreigners and nearly 2 of native Christian converts and Goanese. About 36 per cent. are comprised in the three groups of Brahmans, traders and writers by caste, which contain but 10 per cent. of the male population. But the remarkable feature of this return is that these twenty groups are the only ones in which as much as one in ten of the males is not illiterate, and if the women be included in the calculation, the number of such groups falls to eleven only. That is, the above proportion of literacy prevails only amongst 14 per cent. of the population, including Burmans and foreigners; it contains more than half the total number of those returned as not illiterate, and considerably over three-fourths of those who are returned as acquainted with the English language, a number out of which over 30 per cent. are Europeans, Eurasians, or Parsis. It is not within the scope of this chapter to enter into further details of this distribution; the subject is dealt with in the General Census Report (pages 210-226). The object in view is merely to show that whilst the State efforts to advance popular instruction have been received with distinct approbation on the part of one branch of the community, that branch is, numerically speaking, insignificant, whilst a vast field still remains almost untouched. The latter qualification is necessary, since the census return, to which reference is made above, has one feature which must be described as thoroughly gratifying and satisfactory. It is, that however small may be the proportion of the literate in a community, there is scarcely a single caste-group in India of any numerical importance in which there are not some persons who can read and write. Now, a generation or two back this could not have been said of more than a small fraction of such groups. The education of the country, such as it was, was concentrated to a far greater extent than has been shown above to be the case at present in the priestly, and writing and trading castes, and popular secular education was unknown. To mention only one of the more prominent social prejudices—in spite of the authoritative equality of all in the eye of the State, an equality most practically and thoroughly recognised in the administration of the law and of the finances of the country—even now, it must be admitted, throughout the greater part of India, to insist upon the participation of certain castes in the instruction given in public schools is tantamount to a decree of eviction against the rest of the pupils.* In some provinces, and amongst certain classes, this exclusiveness has yielded more to modern solvents, such as railways, than in others, and the degraded castes are allowed to sit either on a verandah or on a lower section of the floor than the rest, and to deposit their books and exercises on the floor instead of handing them direct to the master. But, for the most part, the boycotting is universal, and the master, as well as the pupils and their parents, has no inclination to relax the rule. Special schools are therefore maintained where the excluded classes are of numerical importance, and a great deal has been done in this way by Christian missionaries, who, especially in Madras, have made a special point of raising the status of what are conventionally, though incorrectly, termed the outcaste population. The extent of the problem, however, may be appreciated from the fact that at the census this class of the community is returned as containing no less than $57\frac{1}{2}$ millions, not one of whom ought, on strict Brahmanic principles, to receive any instruction which would have a tendency to raise him above the servile condition implied by his caste.

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In

* Public schools are theoretically open to all alike, and aided schools which are equally comprehensive are encouraged preferably to more exclusive institutions, but the general rule is everywhere to exclude or to demarcate.

PUBLIC INSTRUCTION.

In connection with Education, it is usual to add something regarding Literature and the Press. The literary activity of India, so far as the number of publications is concerned, is considerable. The annual return, however, includes, amongst books, sundry periodicals, which go a great way towards swelling the list. The last statement for 1891–92 is quoted in the margin. A considerable proportion of the publications of books is in direct connection with the school or University curriculum. The drama, also, receives its share of original works. With a reading public of the dimensions of that specified in the earlier portion of this chapter, journalism is not a highly remunerative way of livelihood, and the highest registered circulation in the case of a vernacular newspaper, or of a Native production published in English, is less than 30,000 copies per week.

| PROVINCES. | Presses. | Publications. | | | |
|---|---|---|---|---|---|
| | | Newspapers. | Periodicals. | Books. English. | Books. Vernacular. |
| Madras | 267 | 75 | 32 | 240* | 544* |
| Bombay | 319 | 166 | 113 | 72 | 840 |
| Bengal | 359 | 104 | 50 | 385* | 1,792 |
| North West Provinces | 384 | 124 | 42 | 60 | 899* |
| Panjab | 164 | 69 | 22 | 38* | 1,248* |
| Central Provinces | 22 | 10 | 2 | 1 | 9 |
| Assam | 8 | 4 | — | 2 | 29 |
| Coorg | 1 | — | 1 | — | — |
| Berar | 9 | 5 | 2 | — | 11* |
| Lower Burma | 29 | 18 | 22 | 7* | 169* |
| Upper Burma | 3 | 3 | — | | |
| TOTAL | 1,565 | 576 | 336 | 805 | 5,541 |

* Including periodicals.

FINANCE.

In concluding this chapter, a few lines must be devoted to the financial aspect of the Educational Department. The returns of which use is made below are those of the department itself, as the general accounts contain but the items charged or credited to the public funds, and which form less than a third of the total dealt with. The following table shows the expenditure for three years of the decade :—

COMPARATIVE STATEMENT OF EXPENDITURE ON PUBLIC INSTRUCTION.

| GRADE &c. | 1881–82. | | 1886–87. | | 1891–92. | |
|---|---|---|---|---|---|---|
| | Provincial. | Total. | Provincial.* | Total. | Provincial.† | Total. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| University | 5,489 | 17,774 | 4,486 | 36,808 | 3,266 | 47,314 |
| Collegiate | 99,249 | 161,708 | 134,319 | 224,854 | 153,768 | 287,283 |
| Secondary | 169,768 | 480,628 | 173,358 | 809,529 | 166,151 | 989,569 |
| Primary | 158,278 | 762,500 | 160,024 | 812,448 | 134,334 | 961,428 |
| Training and Technical | 64,163 | 95,254 | 76,552 | 136,300 | 100,258 | 171,034 |
| Scholarships | 31,608 | 50,867 | 36,447 | 62,847 | 40,861 | 72,707 |
| Direction and Inspection | 148,192 | 168,290 | 154,655 | 199,103 | 154,252 | 224,978 |
| Buildings, &c | 36,021 | 87,203 | 90,813 | 184,470 | 108,270 | 218,234 |
| Miscellaneous | 16,357 | 36,512 | 25,471 | 57,792 | 20,195 | 79,416 |
| TOTAL | 729,125 | 1,860,741 | 856,125* | 2,524,241 | 881,355† | 3,051,963 |

* Exclusive of Imperial grants, amounting to Rx. 12,602. † Exclusive of Imperial grants, amounting to Rx. 13,240.

The three main sources of revenue are provincial grants, municipal grants, and the proceeds of a portion of the local cess charged on the land. Endowments and miscellanous receipts are also available to some extent, and of fees something will be said below. The marginal table shows the relative proportion of the expenditure classed as public and that incurred out of private resources. On the whole, the progress in the increase of the latter has been satisfactory. In the case of Universities constituted on the pattern adopted in India, the State must always incur the bulk of the cost. It is the same with direction and control, and, for the present, at all events, with normal institutions. As regards primary education, the local cess usually

| GRADE. | 1886–87. | | 1891–92. | |
|---|---|---|---|---|
| | Public. | Private. | Public. | Private. |
| Collegiate | 60·7 | 39·3 | 54·9 | 45·1 |
| Secondary | 34·8 | 65·2 | 30·4 | 69·6 |
| Primary | 51·8 | 48·2 | 51·3 | 48·7 |
| Training and Technical | 70·2 | 29·8 | 72·3 | 27·7 |
| Indirect Charges | 75·4 | 25·6 | 75·7 | 24·3 |
| TOTAL | 53·4 | 46·6 | 51·2 | 48·8 |
| TOTAL in 1881–82 | 59·1 | 40·9 | — | — |

usually provides a very high proportion of the funds necessary, and private resources are the less called for. One of the most gratifying features in the accounts is the steady rise in the proportion borne by private resources in the case of secondary education. On the whole, whilst public and municipal expenditure has increased during the decade by 16 per cent., that from private sources shows a growth of 27. The large increase of 36 per cent. from fees alone shows that the classes concerned, especially those who make use of the colleges, have begun to appreciate the advantage of education, even though it may cost them something, a view alien to the former sentiment amongst the literate classes of the natives, which regarded instruction as a boon to be supplied by the State or by private charity. The tendency of municipalities to increase their grants towards the branches of education most consonant with the above sentiment, to the detriment of the institutions required only for the masses, was mentioned in the chapter on those Corporations, and will be found shadowed forth in the table given below:—

| | Provincial Grants. | | Local Cesses. | | Municipal Grants. | | Total. | |
|---|---|---|---|---|---|---|---|---|
| | 1885-86. | 1891-92. | 1885-86. | 1891-92. | 1885-86. | 1891-92. | 1885-86. | 1891-92. |
| University | 0·4 | 0·4 | — | — | — | — | 1·3 | 1·6 |
| Colleges—Arts | 9·9 | 10·2 | 0·1 | 0·2 | 1·2 | 1·7 | 6·3 | 6·8 |
| „ Professional | 5·3 | 7·3 | — | 0·1 | — | 0·3 | 2·2 | 2·7 |
| Secondary Schools | 22·7 | 18·8 | 14·9 | 15·1 | 35·9 | 37·9 | 32·2 | 32·4 |
| Primary „ | 18·6 | 15·2 | 58·6 | 55·3 | 42·6 | 42·7 | 33·2 | 31·5 |
| Training Institutions | 4·0 | 4·7 | 4·0 | 2·7 | 0·3 | 0·4 | 2·3 | 2·2 |
| Technical „ | 5·1 | 6·7 | 0·9 | 1·0 | 2·1 | 2·1 | 2·9 | 3·4 |
| Scholarships | 4·5 | 4·6 | 2·1 | 2·4 | 4·1 | 2·2 | 2·5 | 2·4 |
| Direction and Inspection | 19·4 | 17·5 | 10·2 | 11·5 | 0·9 | 1·8 | 8·2 | 7·3 |
| Buildings, &c. | 7·0 | 12·3 | 7·7 | 8·1 | 11·3 | 7·1 | 6·5 | 7·1 |
| Miscellaneous | 3·1 | 2·3 | 1·5 | 3·6 | 1·6 | 3·8 | 2·4 | 2·6 |
| TOTAL | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 |

The Provincial distribution shows the rise in the importance of technical and professional institutions. Local funds are kept very much to their legitimate uses, though the tendency to rise in the higher grades is perceptible. Municipalities necessarily devote a higher proportion to the latter, as their population contains more of the literate castes. The total account shows that the stimulus to technical instruction, which has been one of the chief and most healthy characteristics of the period under review, has been obtained at the expense of the grants towards primary education and direction.

Taking the matter now in its territorial distribution, the marginal table gives the incidence of the expenditure per head of population, as calculated in the quinquennial review. It must be remembered that this includes all grades of instruction, and not only that in which the population at large is, or ought to be, interested. The expenditure on each class of institution does not require comment, as the difference in the provinces with regard to grouping and system of instruction is very great. Scholarships are granted to the extent of 2·4 per cent. on the total changes. The limits are 7·8 per cent. in Assam and 1·2 in Madras. Taking the whole return, 70 per cent. are attached to collegiate and secondary institutions, and about 13 per cent. to the normal and technical

| PROVINCE. | Cost per Head of Population. | | |
|---|---|---|---|
| | Public. | Private. | Total. |
| | Rs. | Rs. | Rs. |
| Madras | ·078 | ·088 | ·216 |
| Bombay | ·120 | ·114 | ·234 |
| Bengal | ·047 | ·078 | ·125 |
| North-West Provinces | ·042 | ·026 | ·068 |
| Panjab | ·085 | ·042 | ·127 |
| Central Provinces | ·047 | ·016 | ·063 |
| Assam | ·059 | ·035 | ·094 |
| Berar | ·126 | ·035 | ·161 |
| Lower Burma | ·141 | ·073 | ·214 |
| Upper Burma | ·027 | ·010 | ·037 |
| Total | ·068 | ·062 | ·130 |

technical branch. The Provincial distribution, however, varies again, very materially. In Upper Burma the whole of the scholarships are held in survey schools. In Madras the Government scholarships are attached to girls' schools. The Panjab, Bombay, and Central Provinces take the lead in the matter of scholarships at primary institutions.

Finally, the cost of education at each grade of institution should be quoted. The marginal table gives this, together with the cost to private funds. The rate at Arts colleges has been brought down by the increased attendance from the Rs. 199 shown five years ago. In technical schools, too, there has been a reduction, but in the rest the incidence has risen, more especially in the professional colleges and the normal institutions. Many other topics coming under the general head of public instruction must necessarily suggest themselves to all who have had experience of the subject in India, but in this review space cannot be spared for their discussion. The general view that has been given above will serve to show that in all main essentials the present system is working well, though slowly, towards its end, namely, that of introducing the notion of education amongst a people from the greater portion of whom it has been hitherto withheld. The complete revision of the whole system which was so ably carried out in the early years of the decade has enabled the Government of India to remedy the more grave defects, and, so far as it extends, the organisation is now in efficient order. But the difficulties in the way of more rapid progress are peculiarly hard to surmount, as they lie deep down in the social system, and, above all, the notion has yet to be eradicated that book-learning is a means of livelihood to a certain class, and that what ploughing is to the cultivator and shaving to the barber, so are reading and writing to the Brahman or other literate castes. That the instruction to be got from books will in any way tend to the worldly advantage of an agriculturist or menial has not yet dawned upon those classes, and their sons' fitful devotion to the subjects of the IV. Vernacular Standard until they are wanted to weed or drive the plough-cattle carries no conviction with it.

| Grade. | Cost of Education per Pupil. | |
|---|---|---|
| | To Private Funds. | Total Cost. |
| | Rs. | Rs. |
| Colleges { Arts | 88·3 | 162·0 |
| Colleges { Professions | 56·3 | 255·0 |
| Secondary | 15·1 | 21·6 |
| Primary | 1·8 | 3·6 |
| Training | 20·1 | 130·9 |
| Technical | 23·2 | 65·1 |

# CHAPTER XXI.

## MOVEMENTS AND CONDITION OF THE PEOPLE.

Movements and Condition of the People.

The foregoing chapters have dealt with the system of administration and its working in the many and various branches into which the conditions of India require it to be distributed. The functions of government in that country have been shown to extend considerably beyond the simple duties of protection and control to which they are restricted in circumstances where the administration is not so far in advance of the community of whose interests it is in charge, and where the initiative, left so largely in India to the State, would be taken by unofficial enterprise. How far this initiative has been successful in enlisting the co-operation of those for whose benefit it was intended, or, at least, to what extent they have taken advantage of it, can be judged by the information already set forth in this work. But considering the special relationship here subsisting between the governing and the governed, a review of the action of the former can hardly be held complete unless consideration be also given to the general results of that action on the latter. Certain conclusions may, indeed, have been drawn from the account given above of the different branches of the administration, but the latter are so numerous and varied that the results of their working during the 10 years in question require focussing, as it were, on to the life of the people at large, before they can be duly appreciated. It is proposed, therefore, in this, the concluding chapter of the review, to consider the subject under two main heads. First, to show what has been the extent and character of the numerical growth of the population during the last 10 years; and, then, to see whether that growth has been accompanied by the maintenance or improvement of the standard of living, and, if the evidence indicates a variation, to ascertain how far and in what direction the change has taken place. The investigation is limited, as far as possible, to the circumstances of the British Provinces, both because it is with these that the administration is directly concerned, and because it is only with regard to them that the information available can be adequately tested. As far as the mere census variations in the population of Protected territory are concerned, the general results have been noted against each State or group of States in the second chapter of this review, but in several not unimportant cases the divergence between the rates of increase of males and females affords evidence of defects in the preceding enumeration which in this respect vitiate the results on the present occasion.

## A.—MOVEMENTS OF THE POPULATION.

### *Variation in the Population of British Provinces since* 1881.*

The statistics bearing directly on the Census variation will be cited before dealing with the several factors on which the general result depends.

Excluding tracts which were not enumerated in 1881, such as Upper Burma, North Lushai land, and the Quettah stations, a population of more than 19¼ millions was added to British territory during the decade, amounting to that of the entire countries of Spain and Norway, taken together. The net increase of the whole of India, administered and protected, is more than equivalent to the population of England, and not far below that of the Kingdom of Italy. But looking to the already vast population to which this increment was superadded, it will be found that the latter amounts to no more than 9·3 persons annually

| Year. | Population. |
|---|---|
| 1881 | 198,860,606 |
| 1891 | 218,155,115 |
| Increase | 19,294,509 |

* Fuller details are given in Chapter III. of the "Indian Census Report, 1891."

annually in every thousand, or less than 1 per cent., a rate which the experience of the United States of America, and of many of the far older countries of Europe, proves to be, if anything, a trifle below what may be ordinarily considered the normal of a long-settled community. The circumstances of India, however, stand by themselves in this respect, and are subject to such wide oscillations that the term normal is inapplicable with reference to them. On this more will be found below. For the present, it suffices to remark of the above figures that, speaking generally, the omissions, which are mainly those of young women, are probably below those of 10 years back, owing to better knowledge as to the scope and object of the census inquiry, so that the alleged rate of increase may be taken as fully up to that which has actually prevailed.

It is of importance, in the next place, to see what, if any, is the relation between the increase of the population and the density where it has accrued. Omitting the four larger seaports, on account of their special character, and the small detached settlements, like Aden, the marginal table, prepared on the district unit, shows the distribution of the growth of the population over various typical groups of densities. The increase is not confined to special tracts, but with the exception of relatively small areas in Bengal and the North-West Provinces, and of the small province of Coorg, where an early harvest released immigrant labour before the census was taken, it is found throughout the country in every district. Nevertheless, the table shows very distinctly how the rate tends to decline as the higher densities are approached. The apparent break in this tendency at the groups of 262 to 290 densities, is due to the number of South Deccan districts that fell within it, for here, as will be seen below, the rebound from the scarcity that prevailed 14 years ago has been very remarkable. Then again, at a density of 434 per mile, the fall is abnormally great, compared to the rates prevailing just above and below that group, a fact attributable to the inclusion of certain water-logged tracts in the western portion of the North-West Provinces. Finally, the explanation of the irregularity between the highest density and the group preceding it is that the former includes three of the four districts in the Ganges Delta that have suffered severely from malaria and other disease during the decade, whereas the latter comprises the most prosperous districts of Eastern Bengal, of Bihar, and of the adjacent tracts in Oudh and the North-West Provinces, where, in the one case, a varied diet is available in addition to the agricultural advantages of the tract, and in the other the growth of special and highly remunerative non-food crops has become popular. The general rate of increase is approximately attained, it may be noted, in densities below 300 per square mile, or where the mean density of British Provinces is exceeded by about 33 per cent. In all the tracts sustaining a lighter specific population than this, the rate of growth has been considerably higher. Some allowance may be made, doubtless, for disproportionate increase in the accuracy of the enumeration, since the census operations are, as a rule, easier to supervise where the rural population is more closely packed, so there is less nominal increase in the Ganges Valley than in the wilds of Assam, or the deserts of Sindh and the lower Panjab, but the error on this account is scarcely appreciable, and will not materially alter the significance of the facts noted above.

| Mean Density. | Population, in Thousands, 1891. | Mean Percentage of Increase. |
|---|---|---|
| 24 | 3,152 | 17·75 |
| 70 | 4,062 | 14·66 |
| 96 | 9,776 | 14·17 |
| 136 | 17,272 | 14·40 |
| 166 | 12,212 | 13·00 |
| 196 | 5,650 | 14·02 |
| 224 | 9,623 | 10·69 |
| Total below 230 | 61,747 | 13·64 |
| 236 | 5,191 | 10·24 |
| 262 | 8,008 | 15·95 |
| 290 | 10,455 | 15·64 |
| 326 | 3,014 | 9·05 |
| 371 | 9,070 | 8·37 |
| 395 | 5,886 | 8·73 |
| 434 | 14,300 | 4·99 |
| 514 | 44,044 | 6·68 |
| 617 | 25,508 | 7·00 |
| 838 | 28,670 | 8·06 |
| Total above 230 | 154,146 | 8·19 |
| Total Provinces - | 215,893* | 9·69 |

* Exclusive of territory not enumerated in 1881.

The next standpoint from which to examine the increase in population is that of administrative divisions, or as distributed by Provinces. The following table presents the subject in this light, and, in view of what was said in the

the first chapter on the great physical differences found within the limits of each political demarcation, the territory under review has been sub-divided as on the former occasion :—

| PROVINCE and DIVISION. | Density. | Increase Per Cent. | PROVINCE and DIVISION. | Density. | Increase Per Cent. | PROVINCE and DIVISION. | Density. | Increase Per Cent. |
|---|---|---|---|---|---|---|---|---|
| **Madras** | **252** | **15·58** | **Bombay** | **207** | **13·71** | **Bengal** | **471** | **6·89** |
| N. Coast Districts | 279 | 13·55 | Gujarath | 301 | 8·41 | Northern | 459 | 4·63 |
| N. Coast Agency | 68 | 24·17 | Konkan | 210 | 9·50 | Western | 562 | 5·34 |
| Northern | 134 | 18·32 | Deccan | 162 | 17·01 | Eastern | 531 | 11·81 |
| East Central | 359 | 17·43 | Karnatak | 102 | 19·88 | N. Bihar | 607 | 6·35 |
| West | 249 | 21·07 | Bombay Island | — | 0·28 | S. Bihar | 520 | 2·79 |
| South | 458 | 11·66 | | | | Orissa | 411 | 6·79 |
| Southern | 319 | 16·98 | **Sindh** | **60** | **18·97** | Chutia Nagpur | 134 | 9·53 |
| West Coast | 301 | 11·55 | | | | | | |
| | | | **Punjab** | **188** | **10·74** | **Central Provinces** | **125** | **9·66** |
| **N.W. Provinces and Oudh** | **436** | **6·23** | Himalayan | 83 | 4·25 | Eastern | 142 | 13·76 |
| Himalayan | 81 | 15·58 | Sub-Montane and Central | 381 | 11·29 | Southern | 124 | 7·51 |
| Sub-Montane | 486 | 12·06 | Salt Range | 158 | 12·58 | Central | 91 | 10·23 |
| Upper Doab | 509 | 3·32 | Western Plains | 81 | 13·40 | Narbada | 136 | 6·24 |
| Central | 470 | 1·40 | Eastern | 265 | 6·36 | | | |
| North Central | 499 | 6·50 | | | | **Assam** | **112** | **11·30** |
| South | 652 | 6·77 | **Lower Burma** | **53** | **24·67** | Surma Valley | 333 | 11·46 |
| Southern | 221 | 3·22 | Arakan | 46 | 14·36 | Brahmaputra | 117 | 10·8 |
| | | | Pegu | 156 | 24·59 | Hill Tracts | 25 | 11·32 |
| **Berar** | **163** | **8·41** | Irawadi | 83 | 33·68 | | | |
| | | | Tenasserim | 21 | 19·41 | **Coorg** | **109** | **2·94** |
| **Ajmer-Merwára** | **200** | **17·72** | | | | | | |
| Ajmer | 204 | 17·55 | | | | | | |
| Merwara | 187 | 18·30 | **Port Blair** | — | **6·70** | **Aden** | — | **26·44** |

The first place is held by the Lower Division of *Burma*, where the rich rice-fields supply far more food than is required for the inhabitants, and where the cultivated area has very largely increased of late years. It is noteworthy that in this instance the lowest rates are found in company with the lowest density, owing to the relative scarcity of flat arable ground along the two coast strips. *Madras*, which comes next, though at a long interval, illustrates the general tendency of the lowest rate to be associated with the highest densities. Malabar and Tanjore, though increasing at more than the mean rate, show far less rapid growth than the thinly-peopled Agency tracts adjoining Orissa, or the tracts swept by the famine wave of 1876–77. The high general rate in the *Bombay* Presidency is seen to be due to the replenishment of the Deccan and Karnatak after the same famine experience. The low rate in Gujarath is consistent with the relatively high density, and, as has been already mentioned, the Konkan, or south coast, gains by what Bombay Island loses, as the sex-proportions show that numbers of women who used to accompany their male relatives to the capital, now find it worth while to remain at home. The *Panjab* is the last Province, except Assam and Sindh, with a growth exceeding in rate the mean for British India, and, here again, special causes have contributed to temporarily stop the development of the eastern portion. Elsewhere, the rule as to the connection between increase and density holds good, for though the hill-tracts show a lower rate than the thickly-peopled Sub-Montane, the area of arable land, and the food supply generally, is but small in the former, so that the actual pressure is higher than that indicated by the number of persons per square mile. In the case

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of *Sindh*, the increase depends a good deal on a succession of good inundations, and this has not been wanting in the period under review. The *Central Provinces* represent the mean rate of numerical advance in population. The extremes in this Province are found in the rich rice-growing plains of the east, and in the tract bordering on the uncertain rainfall of the Jamna valley to the north. A good deal of the increase in the Central hill-belt is probably attributable to the growth of confidence amongst the wild tribes, which led them to stand their ground at the census, instead of betaking themselves to their native forests to escape it. As regards Eastern India, the rate in *Assam* is fairly even throughout the Province, though in the central districts of Assam proper, a severe epidemic of a special character has proved very fatal during the decade. There has been some compensation in the considerable growth of the immigrant population, chiefly from Bengal and Oudh.

*Bengal* presents considerable variations in rate. There is no doubt that the eastern section of this Province is the most progressive, and that the southern portion of Bihar, which exports a good deal of labour, is almost at a standstill. The northern division of the latter is better off, in spite of its higher densities, but parts of northern and western Bengal have become waterlogged, through the shifting of the course of the great rivers, with the result that their population has slightly declined, owing to fever and to general deterioration of the conditions of existence. Finally, in the *North-West Provinces* we have the nearest approach to the stationary stage yet found in India. The relatively sparsely-peopled hill tracts of the south have been unfortunate during the 10 years both in a deficient and an excessive rainfall; the former leading, of course, to short crops, the latter to the rapid extension of a highly injurious kind of grass, which chokes the soil wherever it once gets a fair footing. As so often found elsewhere, the less civilised tracts in the hills show the greatest rate of increase, whilst the typical tracts of the combined Provinces are those of the centre, where with a very high density the rate of increase is remarkably low. This tract forms the labour market of Upper India, and from it is recruited a considerable proportion of the tea-coolies for Assam, and the few labourers who leave for the West Indies and Mauritius, besides a number engaged on public works or in domestic service in other parts of the country. The western, or lower Jamna division, owing to waterlogging of the soil, shows a decrease in population, as in the corresponding tracts in Bengal, but the improvement of the drainage is under consideration, and will probably be followed by the resumption of cultivation to the same extent as before. There is little that need be said about the smaller provinces. In *Ajmer* the very large increase is attributable a good deal to the railway extension in the eponymous section of the charge, and to the better enumeration of the Mer tribe, in the other. *Berar* has been gradually filling up from the neighbouring Maratha districts for some years, and as a good many temporary immigrants from the Deccan returned to their homes during the last 10 years, a large increase was not to be expected. *Coorg*, where the immigrant element is in a high proportion in the population, enjoyed an unusually early coffee season in 1891, so that a number of the labourers from the coast districts and Mysore had left for home by the date of the census. The indigenous population, however, increased by 16¼ per cent. in the decade, and those speaking the Coorgi language, who are all permanent inhabitants of the Province, increased by more than 22 per cent., so the decline shown in the return under review is merely accidental and insignificant.

It is difficult as well as inadvisable to generalise in connection with this subject, owing to the great variety of the conditions to be considered in Indian life. But so far as the period under review is in question, it is clear from the above sketch that, discounting exceptional circumstances such as recovery from previous famine, the great factor in the growth of the Indian population is the water supply, either direct from the clouds or from any perennial or fairly certain terrestrial source. Omitting Sindh and the Panjab, this is almost tantamount to saying that the more rapid growth of population has been co-extensive with the cultivation of rice as the main staple. We may quote as instances, Lower Burma, Eastern Bengal, Assam, the lowlands of Madras, and the eastern tracts of the Central Provinces.

On

On the other hand, with an equally fine soil and industrious peasantry, the Upper Ganges and the Jamna Valley, where the rainfall is notoriously precarious, support a dense but almost stationary population. In the centre and south-west of the Panjab, again, it is found, as in Sindh, that the extension of the canal system is invariably followed by rapid colonisation of all the land within the influence of the distributaries. The exceptional cases excluded above are obviously those of the Deccan and tracts to the south of it, lying within what is now known as the Southern Famine zone. Here are found oscillations of the sort shown in the 13 districts mentioned in the margin, of which the first six are in the Bombay Presidency, and the rest in Madras. The increase during the last decade in these cases is clearly recovery and not growth to any appreciable extent, except in the tracts affected by new railways or other special causes.

| District. | Variation per Cent. between | |
|---|---|---|
| | 1871 and 1881. | 1881 and 1891. |
| 1. Ahmadnagar | — 3·48 | + 18·50 |
| 2. Sholapur | — 19·02 | + 28·67 |
| 3. Bijapur | — 21·77 | + 27·08 |
| 4. Dharwar | — 10·78 | + 17·65 |
| 5. Belgaum | — 8·56 | + 17·02 |
| 6. Satara | + 0·02 | + 15·40 |
| 7. Bellary | — 20·34 | + 24·74 |
| 8. Anantapur | — 19·07 | + 17·20 |
| 9. Nellore | — 11·37 | + 19·96 |
| 10. Karnul | — 25·80 | + 20·52 |
| 11. Cuddapah | — 17·03 | + 13·47 |
| 12. Salem | — 18·68 | + 23·21 |
| 13. Coimbatore | — 5·99 | + 20·91 |

Before dropping the census figures, there is one other use to be made of them, namely, to show the strength of the attraction, such as it is, exercised on the population of the rural tracts by the vicinity of the town.

Group of Towns.

It has been stated in a former chapter that less than one-tenth of the population resides within urban limits. In considering the increase of this class towns in both British and protected territory are taken together, and return their growth at 9·40 per cent., a rate practically identical with that of the Provinces, and 1½ per cent. below that of the country at large. But here again it must be borne in mind that inaccuracy on previous occasions was probably much rarer in towns than in rural circles, so that it is safe to conclude that there is but little difference in the rate of increase of the respective communities.

Considering the loose definition of a town, it is as well in discussing these figures to discriminate between the places which are really centres of trade or manufacture, and those which are little more than overgrown villages. The marginal table gives the different groups, with their respective proportional increase. The total number of towns here dealt with is 1,933, instead of 2,035, the full number, because the remaining 102 were either not enumerated in 1881, or else have undergone such modifications of boundary that identical figures are not available on both occasions. The greatest difference is in the group of towns containing between 5,000 and 10,000 inhabitants, which fall into the category of places that are often held to be towns on other grounds than the number of their inhabitants, and are therefore subject to the greatest numerical reinforcement from below. The table shows that there has been no regular scale of increase, except in so far as the three lower groups have been recruited to a less extent than the rest, and the sex-detail given in the census return shows that real immigration has taken place in the larger towns only, the smaller having grown up under circumstances of ordinary expansion little different from those prevailing in the surrounding country. Taking the items in detail, it will be found that the urban increase is only markedly above that of the rural tracts in the case of the modern towns, either commercial, or commercial and manufacturing, or again, large military or railway centres, under one or other of which heads come the following examples :—

| Population of Town. | Number of Towns. | Increase per Cent. |
|---|---|---|
| I.—100,000 and over | 28 | 10·58 |
| II.—75,000 | 13 | 6·54 |
| III.—50,000 | 34 | 13·60 |
| IV.—35,000 | 40 | 9·48 |
| V.—20,000 | 103 | 11·58 |
| VI.—10,000 | 391 | 10·66 |
| VII.—5,000 | 833 | 7·54 |
| VIII.—3,000 | 292 | 1·54 |
| IX.—Under 3,000 | 199 | 0·86 |
| Total | 1,933 | 9·40 |

| | | | | | |
|---|---|---|---|---|---|
| 1. Bombay | + 6·28 | 5. Karachi | + 43·01 | 9. Rawal Pindi | + 39·30 |
| 2. Calcutta | + 8·25 | 6. Cawnpore | + 24·61 | 10. Cocanada | + 33·22 |
| 3. Madras | + 16·59 | 7. Poona | + 24·38 | 11. Ajmer | + 41·26 |
| 4. Rangoon | + 34·39 | 8. Meerut | + 19·91 | 12. Hubli | + 43·40 |

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The capitals of States now merged into British districts, and those of provincial Governors, whose dignity has long since passed away, barely hold their own unless combined with a modern adjunct, such as a large new cantonment, as is the case with Lucknow and Agra; or, unless they have entered into the modern spirit of manufacturing competition, as Delhi or Ahmedabad. On the other hand, where they have retained their position as the seat of a Chief's court, they continue to flourish under a patronage of which the others have been bereft. Examples of this are found in the four cities mentioned in the second part of the marginal table.

| Town. | Variation per cent. |
|---|---|
| Patna | — 3·20 |
| Dacca | + 4·10 |
| Surat | — 0·56 |
| Mirzapur | — 1·44 |
| Delhi | + 11·06 |
| Ahmedabad | + 16·29 |
| Lucknow | + 4·49 |
| Agra | + 5·28 |
| Jaipur | + 11·45 |
| Baroda | + 9·30 |
| Gwalior | + 18·19 |
| Haidrabad | + 16·92 |

In connection with the question of how far the principal towns are recruited from outside, the following figures are interesting:—

| | Per-centage born in the City. | | Per-centage of variation in 1891. | |
|---|---|---|---|---|
| | 1881. | 1891. | City-born. | TOTAL. |
| Bombay | 28·41 | 25·70 | — 4·17 | + 6·28 |
| Calcutta | 27·42 | 30·49 | + 15·67 | + 4·10 |
| Madras | 72·63 | 71·97 | + 10·40 | + 11·50 |
| Rangoon | 36·41 | 33·68 | + 24·29 | + 34·39 |

Those for Calcutta are slightly inaccurate, owing to change of boundary in the case of the city proper, as distinguished from its suburbs—but the rest are fairly correct. Madras is dependent but slightly on immigrants, though the latter are increasing in proportion to the total population. In Bombay, Calcutta, and Rangoon, the city-born are in a small minority, and the tendency is to reduce them still further, except, perhaps, in Calcutta, where either the data are imperfect, or the practice of immigrants is to reside in the suburbs to a larger extent than usual.

On the whole, the tendency of the rustic to seek his or her fortune in the city is decidedly weak, except in the case of the larger towns of modern development, in the middle-class sea-ports, and at the great railway centres. In all three of these classes the movement appears to be chiefly that of the trading community and the lower grades of general labourers, both of whom have profited more than the rest by the openings thus disclosed to them by foreign initiative, the advantages of which are secured to them by an impartial foreign Government, irrespective of the race and caste distinctions by which their enterprise was fettered under an Oriental régime.

Cause of variation of the population

Such has been the variation in the population, in point of numbers, during the ten years under review, and before discussing what may have been the changes in their material circumstances, with which this subject closes, it is as well to give a passing glance at the conditions by which, in a general way, that variation is determined. It is almost impossible, in fact, to appreciate the former without some acquaintance with the latter, as in India both the stimulus to the growth of the population and the influences that counteract it are operative with abnormal and almost rhythmic activity. For instance, take the extraordinary high birth-rate, amounting to between 44 and 50 per mille. This is attributable to the encouragement given to marriage, first, by the religious idea that a son is necessary to the spiritual welfare of the deceased, and still more, by the fact that in a society organised as is that of the masses of India, a wife, so far from being an additional burden on the resources of the household, directly or indirectly adds to them. As a set-off against the high rate of reproduction that results from such a prevalence of the married state, we find, first, a prejudice against widow marriage, and then

then, remarkable mortality amongst the newly-born, with a tendency on the part of the mothers either to succumb in early child-bed or to drop off from physical exhaustion before reaching what in Europe is considered to be middle age. Then, again, though early marriage is not chargeable with the superabundance of births in India, it is, no doubt, responsible to some extent for the relatively low vitality of those who survive infancy. It thus happens that a generation in India is a far shorter period than in the temperate zone, and the population is always a younger one, quite apart from any other cause than these social arrangements and their immediate consequences. The mortality is raised, as was shown in the preceding chapter, by diseases which are endemic where such extremes of heat and moisture are found as are frequent and widely prevalent in India, as well as by outbreaks like those of cholera, small-pox, and special forms of fever, as in Assam, Bardwan, and Amritsar. Finally, there has hitherto been the periodical and violent check to population consequent on wide-spread and long-enduring failure of rain. In this last we have another example of the rhythmic course of Indian conditions. Geographic circumstances favoured agriculture and pasture as the means of subsistence of nearly the whole community, and were adverse to commerce. Social rules supervened which intensified the segregation of India from foreign intercourse, so that the demands upon the soil were directly in accordance with the growth of the population, and cultivation engaged the whole attention of the masses. Resort, therefore, to the less favoured parts of the country became inevitable at an earlier period in its history than usual, and, as has been already mentioned, there is no country where the conditions of agriculture vary more than in India. What have been termed the zones of uncertain rainfall are extensive, and where the whole community practically depends on the harvest for its food supply, the proportion that is seriously affected by variations in the latter must be abnormally high. It is true that there is no record of a famine or general failure of crops simultaneously throughout the whole of India, but until a period almost within the experience of the present generation, the means of communication were so imperfect that the bumper crop of one tract had to rot on the ground whilst famine prices were ranging for months at the other side of the country. The population, therefore, which had spread over the tracts most liable to short rainfall, was periodically decimated, or reduced in even a higher proportion. A few favourable seasons suffice, as proved by the case of the Deccan, quoted above, to repeople such tracts until the next catastrophe. In the more favoured parts of the country, given peace and a reasonably efficient Government, the population seems to have been limited simply by the ordinary process of death, somewhat hastened by defective sanitation and primitive medicine. Of what can be done by these people in a new country let the statistics of Lower Burma for the last ten years bear witness, for there, not more than 2 or 3 per cent. of the 24 representing the total increase can be credited to immigration, or, indeed, to other causes than local reproduction.

So far as India is concerned, then, the population question may be thus summarised. There is an abnormally high birth-rate, not due to the youth of the married couples, or to their fertility, so much as to the great prevalence of marriage. The results of this continuous stream of infant life are partially counteracted by a high infant mortality, and by the number of deaths of immature mothers, of women approaching middle age, and by a general low vitality amongst those born of immature parents. The number of possible births is also restrained by the somewhat pronounced abstention from marrying widows of reproductive age, and also, in the regions most subject to short harvests, by the tendency of scarcity to reduce prolificity. The death-rate, like that of birth, is very high, not only amongst infants, but throughout life; owing partly to the liability to epidemic disease, partly to climatic disadvantages, and partly again, to neglect of sanitary observances. Moreover, owing to the enormous preponderance of agriculture as a means of livelihood, the fringe of population abnormally sensitive to inferior seasons, is a wide one, and succumbs in a time of scarcity to maladies which in ordinary circumstances it shakes off. Finally, famine, which periodically recurs in India, has in the past repeatedly swept away all but the fittest from large tracts of country at a time.

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We now come to the influences at work which are likely to modify and of the above conditions :—As regards the prevalence of marriage, there is no evidence of any change at present, whilst the prohibition of widow-marriage, which is considered a mark of superior rank, is spreading in proportion as increased wealth enables a family to put forward its claims to a rise in social position. The great increase in the number of dispensaries in small towns, and the extension of sound medical instruction in the principal colleges, seems calculated to check the death-rate amongst infants as amongst adults ; and the lot of the women is likely to be lightened as the movement spreads for the provision of medical advisers of their own sex. Of the more serious epidemics, cholera cannot be said to show diminution, though its outbreaks are more restricted than before to local bounds. Small-pox, in the same way, is never entirely absent, but its ravages have been mitigated to a remarkable degree by vaccination and hospital treatment. In the case of other diseases due credit must be given to the spread of medical institutions above mentioned, and to the common sense of the people whose prejudice against foreign practice and unknown drugs has largely worn off. Then, as to the very important question of local sanitation and its effect upon the death-rate. Unfortunately, in the present stage of the registration of vital statistics it is only in the larger towns that this can be even approximately gauged, and the whole urban population is no more than a tenth of the whole. In the country, the attempt at reform has had to be made slowly and tentatively. A beginning has been made on the water supply, which is often justly accused of being the source of most of what may be called the ordinary ill-health of the place ; but the system is still almost in infancy. Finally, the influence of famine has to be considered. Since 1876–77 great advances have been made in the direction of mitigating it by various means. First of all, the tracts most liable to failure of rainfall have been connected by rail with the more productive parts of India, and feeder roads have been constructed from the principal stations to local markets. Thus one part of the country can now feed its less fortunate neighbour, and, as experience has already shown, the prices of food grain are thereby kept more or less on a level. Then, the system of famine administration has been completely revised. The Government of India, recognising the probability of the periodical recurrence of these hard times, has required of every Local Government and administration where famine has at any time occurred, the preparation of what is termed a famine code, regulating the State action in connection with the relief of distress. To this is added information regarding the tracts and classes of the population that are most liable to be affected ; whilst surveys have been made and estimates are in readiness, of works of permanent public utility on to which varying amounts of unskilled labour can be at once drafted. Elsewhere in the code rules are laid down regarding the relief of those unable to work and the formation and regulation, medical and sanitary, of famine camps. The suspension of land revenue collections and the advance of cash for the purpose of sinking wells or otherwise protecting an estate are matters closely connected with this subject ; but they concern a class of the population considerably above that on which the pinch of famine is earliest and most severe. Under the operation of the above scheme, it is obvious, as was proved in 1891–92, when the scarcity in South India was localised and hardly amounted to famine, that the loss of life will be in great measure prevented, or, at all events, largely diminished ; whilst the secondary effect of famine, that is, a check on the birth-rate during the succeeding year or two, will take its course.

So far, the variation in the population has been dealt with simply on the basis of the relation between births and deaths ; that is, the natural increase arising from the excess of the former over the latter. With the exception of a very slowly increasing tendency to avoid making full use of a section of the reproductive part of the community, and the casual deterioration for a while by a period of inferior nutrition of the reproductive powers, the general bias is plainly in favour of an increase in the number of births, with a relative decrease in that of deaths, or, in other words, a rise in the rate of net increase. It is beyond the scope of this work to venture upon prediction

prediction, but it is not out of place to call to mind the fact that, circumstances progressing as they are doing, and without any unexpected and startling innovation, it would be contrary to experience if the above result actually took place. As a country fills up with inhabitants, the rate of their increase tends to fall, and, except in Burma and a few tracts in the north and west of India, there is no considerable expanse of virgin land available for the coming generations, so the opportunities for dispersion, in the ordinary sense of the word, are limited. In the other sense, that is, for functional dispersion, or the multiplication of means of subsistence, the prospect is more clear, and, as has been shown in the chapter on agriculture, there is room for improvement in methods of cultivation which would materially increase the supporting power of the soil. On the whole, therefore, even supposing the rate of increase that prevailed between 1881 and 1891 to be maintained till 1901, there seems no reason to suppose that, save in isolated cases of admitted congestion, the addition of the 21½ millions will prove a burden which the provinces will have any difficulty in bearing.

The subject of actual migration, as distinguished from mere expansion over contiguous or adjacent territory, has been reserved for separate comment. From what follows it will be seen that the movement in this direction, beneficial as it is to certain parts of the country, cannot at present be reckoned as a factor in the variation of the population at large.

## MIGRATION.



A change of domicile, either permanent or for a lengthened term of years, is not a mode of relief that generally commends itself to an agricultural community, more particularly where the practice of independently cultivating small holdings for the family support is so widely spread as it is in India. But there are indications that in the present day the Indian peasantry is not wholly negligent of the spirit of enterprise which persuades the more adventurous that the road to maintenance and possibly to fortune extends beyond the limits of the half-dozen nearest villages. In respect to foreign emigration the tendency is, no doubt, still weak; it is, nevertheless, fairly regular, and is not unlikely, under the careful supervision now bestowed upon it by the State, to permeate beyond the comparatively narrow range of class and locality to which it has been hitherto restricted. The internal movement of the population has become within the last decade decidedly more brisk, owing chiefly to the extension of facilities of travel. The labouring class, that has been hitherto disposed to confine its outlook to the harvest of the immediate neighbourhood, is now able to transfer portions of its number cheaply and expeditiously to distant parts of the country where field operations are later than elsewhere, or to centres of non-agricultural employment, where work can be always obtained to fill the gap between one harvest and another, if the applicant be a landholder, or permanently, in other circumstances. Then, again, the field of employment is widened by the great improvement that has taken place in the coasting traffic of late years, placing Ceylon, Burma, and even the Straits Settlements, within the reach of the labourer of Madras and Bengal.

In considering the movements of this description it is necessary to discriminate between the various classes of migration. First, there is the statutory or regulated emigration, conducted under State control; and this, in its turn, has to be subdivided into the colonial, or transoceanic, and the transfer of labour to special tracts of India itself, such as the tea estates of Assam. Then comes the free emigration, which consists mainly of the passenger traffic between India and Burma, Ceylon, and, as just mentioned, the Straits Settlements with the local States in political connection with them. Lastly, there is the internal and seasonal movement, either with reference to the rice and wheat harvests, or fluctuating with the demand for labour in the docks and factories in the chief seaports. The advance of the community on the waste arable area is not so much migration as the expansion of the surrounding population, and has been discussed accordingly, in connection with other branches of the administration. The rest will be considered here in the above order.

Colonial Migration.

Colonial Migration.

Act XXI. of 1883.

The protection that the State is enabled, by international understanding, to extend to its subjects beyond its own territorial limits is especially required in the case of a community illiterate, ignorant, docile, and uninitiative to the extent to which the Indian labourer is endowed with those qualities. This has been fully recognised by the Government of India in the provisions of Act XXI. of 1883, which now contains the law on the subject, and in the control over foreign emigration exercised on the authority of that enactment. In the first place, the emigration of Indian labourers under contract is prohibited to any foreign country beyond the sea in which such provisions as the Governor General in Council may think sufficient have not been made by law or ordinance for their due protection during their residence there; and if those provisions are found to be neglected or contravened in practice, after emigration has been sanctioned, the prohibition can be at once reimposed. It is provided, too, that the same course may be taken in case of the outbreak of any dangerous epidemic disease, or when the mortality among emigrants is found to be excessive. The next step is the appointment of an Agent for the country in question, residing in India, and responsible for the due observance of the provisions of the law in respect to all persons recruited or despatched through him to the Colony. All such Agents act under the general supervision of the official Protector of Emigrants, who is entrusted with the whole working of the Act. As the emigrants have to be recruited from various parts of the country at a considerable distance from the port of embarkation, recruiters are nominated by the Agent and licensed by the Protector. Minute provision is made regarding the conduct and procedure of these subordinates, who are liable to prosecution and withdrawal of license in cases of violation of their instructions. Every precaution is taken, under the Act in question, to let the intending emigrants know the exact terms on which their labour is being engaged, and to secure good treatment for them during the interval between registration and embarkation. The latter only takes place at Calcutta and Madras, or the French ports adjacent to Madras. It is legally permissible at Bombay, but for many years past no emigration has been undertaken from Western India. A further examination of the persons brought down by the recruiters is then made by the medical Inspector, who is also charged with the inspection of the depôt where they are lodged pending departure from India. Only such persons as are certified to be physically fit to undertake the voyage are allowed to embark. The vessels chartered for the conveyance of emigrants are also subject to inspection, and have to be specially licensed for the purpose by the Local Government, under due conditions regarding space, sanitation, and the supply of food and water. Many other details in connection with the arrangements, such as the seasons during which emigration is permissible to the respective Colonies, and the relative number of women prescribed and children and other dependents allowed, are dealt with either in the Act or in the rules published under it. The terms on which emigrants are allowed to be enlisted in India are settled beforehand, as observed above, by convention with the Colonies concerned, and vary considerably in detail. Whilst, on the whole, the rights and obligations of the emigrants are equitably provided for, there are certain questions which from time to time give rise to considerable difficulties. Amongst these may be mentioned such matters as marriage during the term of agreement, permanent settlement in the Colony, re-enlistment on expiration of the original term, succession, and the disposal of the estates and property of those emigrants who die on the voyage or during residence abroad. Most of these have been discussed and settled on their merits as they arose, and, generally speaking, it is only with regard to the last that trouble is now experienced. This is due partly to the discrepancy of the law on the subject, partly to the intricacy of custom as to succession amongst Hindus, and partly, again, to the incompleteness of the information registered by the emigrant as to his family and domicile, or native place. The countries scheduled

COLONIAL MIGRATION.

scheduled in the Act as allowed to draw upon India for their labour supply are the British Colonies of Mauritius, Natal, Demerara, and Fiji, with the West India Islands of Jamaica, Trinidad, Santa Lucia, Grenada, St. Vincent, Nevis, and St. Kitts; the Netherlands Colony of Dutch Guiana, and the Danish Colony of St. Croix, the last of which does not seem to indent for emigrants to any appreciable extent. The French Colonies of Réunion, Martinique, Guadaloupe, and Cayenne are also duly scheduled, but, owing to the inadequate measures taken there for the protection of Indian emigrants, the Government of India felt themselves compelled to prohibit any further recruitment to Réunion from November 1882, and to the rest from November 1888. Correspondence regarding the removal of the embargo has since passed, and during 1893 an officer was specially deputed by the Government of India to visit Réunion, where the conditions were worst, and investigate the state of affairs, but up to the time of that visit nothing had transpired that could reasonably induce that Government to modify their view that the rules in force regarding emigrants are not such as justify Her Majesty's Government in subjecting to them those under British protection.

Colonies to which emigration is permitted.

The Colonial Emigration Returns are summarised in the statement given below, and from the latter it may be seen that, whatever the benefits that may be derived from the movement by the Colonies, the relief hereby afforded to the population of India is scarcely significant :—

Ten years' returns of emigrants.

COLONIAL EMIGRATION.

| YEAR. | TOTAL EMIGRANTS. | | | | MAURITIUS. | | NATAL. | | DEMERARA. | | British West Indies (Calcutta). | Fiji (Calcutta) | FRENCH COLONIES. | | Dutch Guiana (Calcutta) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total. | From Calcutta. | From Madras. | From Karikal, &c. | Calcutta. | Madras. | Calcutta. | Madras | Calcutta. | Madras. | | | Calcutta. | Karikal. | |
| 1882-83* | 13,504 | 9,576 | 1,349 | 2,579 | 994 | 580 | 878 | 769 | 2,984 | – | 2,361 | 922 | 986 | 2,579 | 451 |
| 1883-84 | 17,936 | 13,808 | 2,625 | 1,503 | 2,534 | 1,773 | 1,923 | 852 | 2,731 | – | 2,661 | 1,514 | 965 | 1,503 | 1,480 |
| 1884-85 | 22,384 | 17,543 | 4,836 | – | 2,016 | 2,093 | 1,282 | 2,266 | 5,827 | 477 | 3,933 | 2,316 | 495 | – | 1,679 |
| 1885* | 6,967 | 5,884 | 1,083 | – | – | – | – | – | 3,688 | 1,083 | 1,656 | 540 | – | – | – |
| 1886 | 7,666 | 6,423 | 1,243 | – | – | 747 | – | 496 | 2,857 | – | 2,201 | 1,012 | – | – | 353 |
| 1887 | 6,889 | 5,966 | 923 | – | – | 265 | – | 658 | 3,836 | – | 2,130 | – | – | – | – |
| 1888† | 9,624 | 7,121 | 2,127 | 376 | – | 714 | – | 1,413 | 3,572 | – | 2,270 | 537 | 229 | 376 | 513 |
| 1889 | 15,706 | 10,947 | 4,759 | – | 2,000 | 2,544 | 693 | 2,215 | 3,426 | – | 2,397 | 675 | – | – | 1,256 |
| 1890 | 18,298 | 13,061 | 5,237 | – | 1,110 | 1,929 | 1,432 | 3,308 | 4,673 | – | 3,435 | 1,155 | – | – | 1,256 |
| 1891 | 17,185 | 15,668 | 1,517 | – | 654 | 335 | 1,579 | 1,182 | 5,776 | – | 5,988 | 1,055 | – | – | 616 |
| TOTAL | 136,159 | 106,002 | 25,699 | 4,458 | 9,308 | 10,980 | 7,787 | 13,159 | 39,370 | 1,560 | 29,532 | 9,726 | 2,675 | 4,458 | 7,604 |

* Emigration to Réunion was prohibited in November 1882, and to the French West Indies, in November 1888.

† In 1885 the calendar year was substituted for the official, in order to agree with the colonial system of return, so that for that year only nine months (1st April to 31st December) accounted for are here entered.

From the Census Returns of the chief Colonies to which emigrants from India resort, it appears that there were in 1891 about 551,000 natives of India, or persons of Indian blood, resident in those Colonies. The details are shown on page 409.

Of the emigrants to French Colonies, 2,675 embarked at Calcutta, and the remainder from Karikal or Pondicherry, but, with the exception of a few to

COLONIAL MIGRATION.

Guadeloupe in the early part of 1888, there have been no transactions since 1883–84 and 1884–85, respectively, for the reason given above. Emigrants for Mauritius are recruited in nearly equal numbers from Madras and Bengal. Natal seems to prefer Madras, and for four years no emigrants were recruited through the other port at all, whilst in Madras there was but one year's intermission of the transactions. On the other hand, Demerara draws its supply almost entirely through Calcutta, and only applied on two occasions to the southern Presidency. In nearly every Colony the demand for labour depends very much on the sugar market. In 1884–85 the prospects of that product began to darken, and towards the close of the season indents for labour virtually ceased, except from Demerara and Trinidad, which have always been steady in their custom. Next year, representative institutions were introduced into Jamaica, and their establishment signalised by the prohibition of the importation of foreign labour. This embargo was removed, however, in 1890, since when the supply has been more than double that sent in the early parts of the decade. The sugar industry revived a few years ago, and indents for the Colonies that chiefly depend on that product for their prosperity have been on the increase. But, on the whole, balancing one labour market against another, the demand shows no regular or steady upward tendency, and the variations of the harvest, which influence very considerably the movement of the population within India and to the adjacent countries, where labour is in demand, do not seem to materially affect the emigration to longer distances. The Colony of Fiji entered the field in 1878, and since 1882 has been indenting annually, with but one year's intermission. It is supplied entirely through the Calcutta agencies, and though on one occasion an indent was received in Madras, the supply was not forwarded, and the attempt has not been renewed. Natal was earlier than Fiji in first applying to India for labour, but between 1860 and 1875 very few emigrants went there. Then Calcutta supplied a fair number, varying between 400 and 6,000 per annum, until 1881, when an agency was opened in Madras, which, from 1886 downwards, has taken the lead. Last year, however, Calcutta recovered its position. From the Madras returns, moreover, it seems that for several years, up to 1888 in fact, the chances of saving in this Colony were but small, and many emigrants returned in a state pecuniarily no better than when they expatriated themselves. Of late there has been considerable improvement in this respect. As regards the comparatively steady emigration to Demerara and Trinidad, it must be remembered that the stream from India began to flow nearly 50 years ago, so that even a slowly assimilative population has had time to appreciate the advantages of a spell of work in a country which has been visited by members of their community for nearly a couple of generations. Jamaica, which began its indents at the same time as Trinidad, has never taken so large or regular a supply. It is worth note, too, that, out of 45,100 emigrants who returned from the Colonies in the decade, no less than 7,300, after a certain time in their native land, re-enlisted for a further term, though not necessarily in the same Colony, for experience leads to discrimination. Throughout the recruiting ground that finds its outlet in Calcutta, all Colonies except Burma, Ceylon, or the Straits Settlements, are known collectively as "the islands," and the person emigrating for the first time, whether he goes alone or in company with others of his acquaintance, does not think of inquiring further into nomenclature. But, once he has worked out his term, he is guided by his own experience or by the results of comparing notes with his fellows, so that he forms his own opinion as to whether he will return to the Colony he knows or attempt fresh ground. The returns indicate that there is a decided preference for Demerara and Trinidad over others that have been tried.

The latest Census and other Returns from the Colonies in question show an Indian population, including the persons of Indian parentage born in the Colony, of 551,800, of whom 495,500 were located in British possessions, and the rest in Surinam and French possessions. Amongst the former, the chief contributories are Mauritius (256,000), British Guiana (105,400), Trinidad (70,200), and Natal (41,100).

INDIAN POPULATION.

COLONIAL MIGRATION.

| COLONY. | Males. | Females. | TOTAL. | Born in India. |
|---|---|---|---|---|
| Natal | 25,686 | 15,456 | 41,142 | 29,868 |
| Grenada | 1,222 | 896 | 2,118 | ? |
| Leeward Islands | 67 | 3 | 70 | 70 |
| St. Lucia | 1,567 | 956 | 2,523 | 1,952 |
| St. Vincent | 209 | 123 | 332 | 332 |
| Trinidad | 42,905 | 27,313 | 70,218 | 45,577 |
| British Guiana | 64,703 | 40,760 | 105,463 | 73,031 |
| Jamaica | 5,774 | 4,342 | 10,116 | 5,193 |
| Mauritius | 147,595 | 108,421 | 256,016 | 99,425 |
| *Rodriguez, &c.* | 43 | 14 | 57 | 57 |
| Fiji | 4,998 | 2,470 | 7,468 | No return. |
| TOTAL | 294,769 | 200,754 | 495,523 | |
| Réunion | | | 22,069 | |
| Martinique | | | 7,783 | |
| Guadeloupe | | | 16,359 | |
| Surinam | | | 10,064 | |
| | | | 551,798 | |

Recruiting Fields—Bengal.

In connection with the recruiting field, it has been stated above that nearly all the emigrants for transoceanic destinations come from certain restricted tracts, and are by no means collected from India as a whole. The emigrants that embark from Madras, for instance, are almost all natives of that Presidency or its immediate neighbourhood. In the case of Calcutta the choice is from a more distant field, since foreign migration, especially by sea, has no charms for the denizen of the coast and delta, so that the supply has to be drawn from the inland tracts of South Bihar and the south-eastern districts of the North West Provinces and Oudh. Bihar, Gaya, and Shahabad, and further west, Basti, Faizabad, Balia, Ghazipur, Jaunpur, and Azamgarh, are names that occur over and over again in the returns as the most fruitful of the recruiting grounds for the Colonies. The inhabitant of Bengal, when he has to move at all, prefers the tea-gardens of Assam and the Tarai, or sub-Himalayan tract. It is true that in the tables of origin the district in which Calcutta stands is credited with a good number of the emigrants, but this is explained by the fact that persons wishing to be engaged on tea-gardens come down to the capital, and if they fail to be selected for the destination of their choice, are often snapped up for the Colonies. To remedy this practice, the number of recruiters licensed for Oudh and Bihar was recently considerably augmented, with the result that the emigrants enlisted in and round Calcutta nearly disappeared from the roll in 1891, in favour of men brought straight from the country.

| Province, &c. | Colonial Emigrants, 1882-91. | |
|---|---|---|
| | Number. | Per-centage. |
| East Bengal | 128 | 0·09 |
| West Bengal | 1,866 | 0·37 |
| Central Bengal | 767 | 0·56 |
| Orissa | 135 | 0·10 |
| Bihar | 26,331 | 19·34 |
| North-West Provinces | 51,179 | 37·59 |
| Oudh | 19,423 | 14·26 |
| Central India, &c. | 1,280 | 0·94 |
| Panjab | 1,506 | 1·11 |
| Nipal, &c. | 1,138 | 0·84 |
| Madras | 32,406 | 23·80 |
| TOTAL in 10 Years | 136,159 | 100·00 |

Colonial Migration.

Madras.

In the Madras Presidency the labour supply is demarcated in very much the same way. The recruits for distant colonies are chiefly from the coast districts round the capital, and directly to the south of it. Tanjore supplies the Straits Settlements, and has recently entered the market for Burma, which formerly trusted entirely to the northern coast. The extreme south directs its attention to Ceylon. In ordinary years there seems to be less tendency to emigrate amongst the Deccan population of this Province than amongst the Tamil inhabitants.

Savings of Emigrants.

In concluding these remarks on emigration to the colonies, it is of interest to add a statement showing the amount of savings declared by those who embark on their return to India. It is highly probable that the information is not altogether complete, but it serves to indicate the relative position of the colonies mentioned, and the general nature of the results of the movement. It must not be forgotten that in several colonies there are considerable inducements to an Indian peasant to settle down on plots of land assigned to him by the local authorities, and on these he labours for his own profit on the expiration of the term of service for which he was engaged. In Oudh and the North-West Provinces, for instance, where caste-purity is much regarded, a returned emigrant is at some disadvantage amongst his fellows. Amongst the emigrants from this part of the country there appear in the roll many of the Brahman caste, which in the tracts just mentioned is largely engaged in cultivation, and these men, in many instances, contract marriages during their residence abroad which would prohibit their reception into their own community if they returned to their native village, so they choose the comfort of domesticity in perpetual exile. In the portion of this return which relates to Madras, it may be noted that whilst the average savings returned by the Mauritian emigrants were more than double during the first five years of the decade what they were in the last five, the reverse is the case, to an exaggerated degree, as regards Natal; for the results for the first period amount to an average of less than Rs. 18 per head, whilst the last five years yield a mean of Rs. 183. The emigrants from Calcutta to the same colonies fare differently. Those who come back from Natal saved more in the first period than in the last, and though the figures for Mauritius vary in the same direction as in the other Presidency, they are by no means so low in their incidence. In nearly every case the last five years show relatively smaller savings; but it is not safe, considering the uncertain scope of the return and the possible extension of the practice of stopping on beyond the term of labour, as free settlers, to assume from these figures that emigration has really become less remunerative throughout the whole field open to it.

Returned Emigrants and their Declared Savings between 1882 and 1891.

| Colony. | Numbers Returned. | Declared Savings in Rupees. | Average Savings per Head. | |
|---|---|---|---|---|
| | | | 1882–86. | 1887–91. |
| | | *Rs.* | *Rs.* | *Rs.* |
| Demerara | 16,507 | 2,898,386 | 224 | 140 |
| Trinidad | 4,720 | 1,231,396 | 299 | 238 |
| Dutch-Guiana | 2,807 | 441,833 | 176 | 144 |
| Jamaica | 2,774 | 429,186 | 161 | 149 |
| Sta. Lucia and St. Vincent | 1,654 | 115,470 | 66 | 107 |
| Fiji | 913 | 109,617 | 135 | 120 |
| Mauritius (*Calcutta*) | 9,048 | 728,313 | 98 | 41 |
| „ (*Madras*) | 6,418 | 288,738 | 58 | 27 |
| Natal (*Calcutta*) | 3,272 | 346,647 | 146 | 90 |
| „ (*Madras*) | 2,991 | 489,720 | 18 | 183 |
| Martinique (*Calcutta*) | 144 | 6,148 | 50 | 30 |
| Guadeloupe (*Calcutta*) | 3,233 | 244,422 | 39 | 122 |
| Réunion | 338 | 5,080 | 33 | 9 |

## Migration to Burma, Ceylon, and the Straits.

Migration to Burma, Ceylon, and the Straits.

Ceylon.

The movement between India and Ceylon is confined to the two districts of Madura and Tinnevelli in the Madras Presidency, and, since the steamer service has been improved, to a few people from the Tanjore district. It is influenced by three main factors. First, the prospects in the native country of the migrants, for a bad harvest induces many to leave for the season who would

would otherwise be content to stop at home. Secondly, the prospects in Ceylon, where the tea, coffee, and cinchona estates absorb most of the labour that lands on the island itself; and lastly, the extent of the pearl and conch fisheries of Manaar, in the narrows between the mainland and the north-east coast of the island. As a rule, the traffic is through the ports of Tuticorin, Tondi, Pamben, and Colombo. By far the greater number of the emigrants return after the season of out-door work is closed. In the ten years under review, out of 580,709 that were registered as having left the Presidency for Ceylon, only 46,738 are not found on the list of the returned. From the annual statements of movement in and out of the Presidency which are published by the Madras Government, the Ceylon migration accounts for 56 per cent. of the emigrants and nearly 64 per cent. of the persons returning from a temporary exile.

MIGRATION TO BURMA, CEYLON, AND THE STRAITS.

Ceylon.

Labour for the Straits Settlements, also, is mainly recruited in the same Province. Up to 1884, it was controlled by special legislation, but the Act affecting it was repealed in that year, in favour of free traffic with the alternative of contract entered into before leaving India, a process which entitles the labourer so engaged to protection during his residence abroad. Free labour, also, is under supervision, and inspection of the vessels that are employed in its transport, and the passengers on board them is provided for by an Ordinance of the Straits Administration. The traffic is centred in Negapatam, though a few passengers still go occasionally through the French ports. It has not been considered desirable to extend the movement at present to the Dutch colonies, or to the parts of Borneo that have applied for the privilege. The returns show a rise in the number of emigrants from 1,759 in the first year of the decade, when the controlling Act was still in force, to 30,502 in 1891, the last year under review. In 1884–85 the number rose from 1,808 to 14,395, and has approached an average of 19,000 since that year. The returned emigrants, too, have largely increased, owing to improved means of transport, and range about an average of 15,000 per annum. There are barely as many persons remaining abroad, according to the return, as there are in Ceylon, but owing to the change in system in 1885, probably a considerable number of free passengers were not registered on their return during part of that year. The whole number on the list is 164,346, or 16 per cent. of the emigrants from the Madras Presidency. They come almost exclusively from the district of Tanjore, and, in small numbers, from its neighbours to the north.

Straits Settlements.

Burma has been for many years a good field for emigrants from India. For the most part they come for the rice harvest, and the subsequent operations connected with that product, and though many, especially from Madras, now settle for some years in the country, the majority depart homewards as soon as the immediate need of their services is over for the season. Labour to Burma is not under regulation, and is in part encouraged by assisted passages or subsidies paid to the leading vessel owners, and the custom once established, the movement seems to have advanced, as will be seen from the marginal table. The return is admittedly imperfect, owing to the difficulty of registering the whole of the passengers that crowd in during the winter months, and to the practice of marching by land from the eastern frontier districts of Bengal. Still, so far as the progress of the movement is in question, the statement serves its purpose. It may be noted that in the first five years of the decade, 67 per cent. of the immigrants returned to their country, whilst in the last period the proportion rose to 71. Some of the balance settled, no doubt, in the larger seaports, such as Rangoon and Maulmain, where work is to be had all the year round; but the mortality amongst those who merely come for the season, and herd together in cheap and crowded lodging-houses, is stated to be considerably above the average of the rest of the inhabitants of the town. According to the Madras returns, compared with those given in the above table, which are taken

Burma.

| YEAR. | Burma. | |
|---|---|---|
| | Entered. | Left. |
| 1882–83 | 72,294 | 36,940 |
| 1883–84 | 83,045 | 45,088 |
| 1884–85 | 66,000 | 45,000 |
| 1885–86 | 56,095 | 50,624 |
| 1886–87 | 78,691 | 55,408 |
| 1887–88 | 90,362 | 52,951 |
| 1888–89 | 87,506 | 63,535 |
| 1889–90 | 86,509 | 65,055 |
| 1890–91 | 127,915 | 93,521 |
| 1891–92 | 139,697 | 100,818 |
| Total | 878,214 | 608,940 |

MIGRATION TO BURMA, CEYLON, AND THE STRAITS.

Burma.

taken from the Burma reports, the former Presidency only supplies about 28 per cent. of the immigrants, and 26 of the natives of India who return to their country every year. But it is probable that the proportion is a little higher than this. The movement for many years was restricted entirely to the Ganjam and Vizagapatam districts of the Presidency and to the port of Cocanada, formerly known as the Kalinga tract, from which the labourers landing in Burma are collectively called Kling, whether they hail from that part of the country or from the crowded district of Tanjore, which entered the market in 1886. The rest of the immigrants are from Bengal, either through Calcutta or Chittagong. The acquisition of Upper Burma widened the field of employment, not only by the work to be got in that territory itself, but indirectly by leaving for the Indian immigrant a good deal in the lower division of that Province which had been done by settlers from the kingdom of Ava who had temporarily left their native country, but who returned to it permanently when it was united with their chosen place of exile. Like the movement to Ceylon, that to the Burma ports varies greatly with the season in Madras and the prospect of finding work nearer home. For example, the inception of an extensive irrigation project and of the East Coast Railway during the decade, is said to have had a decidedly lowering effect on the number of passengers from that coast for more than one season. On the other hand, the partial failure of crops in Ganjam and the neighbourhood in 1888–89, acted as a stimulant. In connection with this subject the census returns are not conclusive, as on the fact of whether the rice harvest in Burma is an early or a late one depended the registration of the temporary immigrants before their return to India. Luckily, there was but little difference in this respect between the years 1881 and 1891, and the two returns show that in the former year there were 74,430 immigrants from Madras, and 102,861 from Bengal, against 128,096 and 112,069. respectively, in 1891. But the increase amongst the Burmese themselves during the decade has been so rapid that the proportion of Indian-born residents has only risen from 494 per 10,000 to 510.

## REGULATED EMIGRATION TO ASSAM.

REGULATED EMIGRATION TO ASSAM.

Very shortly after the organisation of the tea industry in Assam, it was found that the supply of local labour was inadequate to cope with the new demand. It became necessary, therefore, to indent upon the more congested districts of the neighbouring Provinces, and to have recourse, also, to tracts of which the climatic conditions were sufficiently akin to those of Assam to enable the inhabitants to transport themselves to their new field of employment with as little change of physical circumstances as possible. At the same time, the need of control was found by the Government to be as necessary as it is in the case of Colonial emigration, though it has been the policy of the State from the beginning to restrict its control over the emigration and labour system to the minimum that seemed required to meet the circumstances, and to take every reasonable opportunity of clearing the way for its entire abolition. This control has been exercised in the interests of the persons thus transported, by providing that their freedom of contract is maintained, that they are treated with due regard to health and comfort during their journey to the estates to which they are bound, and are properly attended to whilst performing their part of the contract there. The employers, in turn, are duly protected against breach of contract on the part of those whom they have necessarily been at considerable expense to recruit, and for whom they are obliged to maintain large ranges of buildings, a medical staff, and the other heavy charges inevitable when a community of the strength of those in question has to be supported. The first enactment on this subject was passed by the Bengal Legislature in 1863, and dealt with the question only so far as the actual migration was concerned, not with the contract. Two years later, it was found that the relations between employer and employed required regulation, and a second Act was passed, dealing with those, as well as with sanitary points involved in the system of recruitment. Several other Acts followed, and, finally, as the Province had been separated from Bengal of which it formerly was a division, an amending Act was passed in the Council of the Governor General, under

under the title of "The Inland Emigration Act," or I. of 1882, by which the system was regulated during the period under review. Put briefly, the object of the new Act was to give the employer the penal contract as security for his outlay in connection with the recruits, whilst ensuring the latter complete protection by the State. Some important changes, too, were made by this law, first, by giving more scope to free emigration, which had been permitted by the Act of 1873, side by side with that under contract entered into beforehand; secondly, by giving sanction to contracts made locally; and thirdly, by extending the maximum term of contract from three to five years. In other respects it provides for licensed recruiting, either through contractors, by their agents, or by the agents deputed by individua employers; for the registration, engagement, lodging and transport of the people recruited; for their tasks, accommodation and medical attendance on the estate, and for the cancellation, termination, or renewal of their contract, as the case may be.

Regulated Emigration to Assam.

Certain inconveniences subsequently arose in the working of this Act, especially in reference to the abuse of the sanction of free labour, and the extremely inadequate sanitary provisions made for the migrants on the journey to Assam. The former difficulty was due to the spread of the class of unlicensed recruiter, who induced emigrants to set out for Assam without any engagement, and, in not a few cases, on false promises. The second danger was met by the local Legislature in Bengal, through which Province all the emigrants have to pass. It was also found that the mortality on the estates themselves was abnormally high, and that the conditions of life there were peculiarly detrimental to the persons coming from a distant part of India. Some further modification of the law as regards these points was therefore thought necessary, so a Bill dealing with them has been introduced into the Governor General's Council. It has only just become law (1893), and, indeed, it was not introduced till after the expiration of the period covered by the present review, but it may be stated that its main provisions relate to the execution of contracts at the place where the immigrant embarks on the Brahmaputra, on his voyage up that river; to the reduction of the maximum period of penal contract from five to four years,* and to strengthening the hand of the local authorities in regard to the closing of insanitary estates. As to the first point, it is found that the majority of immigrants to the Assam Valley are under contract, whilst those to the Surma Valley are generally free, so that the local Bengal Law, if extended to that tract, will fully meet the case. The reduction of the term of engagement has always been an object with the authorities, and since it is found that immigrant labour, as a rule, voluntarily re-enlists on the expiry of the original engagement, there is clearly no reason for retaining a provision which was mainly intended to secure the employer against loss by the departure of his labourers before they had had time to work off the cost of transporting and maintaining them. The attention of the Assam administration has been closely given to the working of the Act, so far as the control of abnormally unhealthy estates are concerned, and a case has been fully made out, in the opinion of the Government of India, for the bestowal of more complete power of inspection and subsequent action. In introducing the Bill in question, the Member of Council in charge of the measure stated as follows, and his words sum up the case tersely:—

"The result of this protracted investigation has been not only to show that the continuance of the labour system established in 1882 is essential for the well-being of the industry, which has done so much towards colonising and opening out the rising Province of Assam, and in the prosperity of which the Government of India and all of us have a great and natural interest, but also to bear out the opinion, expressed again and again by successive Chief Commissioners and other impartial observers, that the condition of labourers on tea-gardens is far superior to that of the masses in the districts from which they emigrate. It has been also made clear that the time has not yet come when labourers can be left to emigrate of their own accord and at their own charges; that without the security of the present system employers could not risk large expenditure in assisting them

* The Act as passed fixed four years as the term, but the original proposal was for three, and this point has not been finally settled.

REGULATED EMIGRATION TO ASSAM.

them to emigrate; and that, therefore, the continuance of the system established in 1882 is still required as a means towards drawing off the surplus population of the recruiting areas and opening out the sparsely peopled districts of Assam. The system has worked eminently to the advantage of the emigrants, and in a manner on the whole creditable to the body of planters; and the Government of India, after prolonged and anxious consideration, have come to the conclusion that there are only two serious evils which have to be remedied. These are, first, abuses and malpractices in recruitment; and, secondly, the high rate of sickness and mortality on the gardens, chiefly among newly-arrived emigrants."

To show the justice of the remarks in the opening of the above quotation, it is only necessary to turn to the Census return of Birthplace, from which it appears that 9·3 of the population of Assam comes from beyond the limits of the Province, that out of the total increase of over 11 per cent. no less than 4·7 is due to immigration, and that in the 10 years under review the number of the immigrants has increased by 82 per cent. Excluding the people born in the districts of Bengal immediately adjacent to Assam, who are probably peasants of frontier villages, the labourers on tea-estates constitute nearly 8 per cent. of the population, and are recruited at the mean rate of about 38,500 per annum. Moreover, and this is a very important feature in the position of affairs, most of those engaged either enlist for a further term, as stated above, or settle on plots of land held either from the State direct or from their late employer or some other large landowner. The number of these settlers has increased during the decade by about 191,000, holding more than 32,000 acres of land from Government alone, and to this extent, accordingly, the Province has gained by the addition of a permanently domiciled body of trained agriculturists.

The marginal return, which is based mainly on registration at the different estates, comprises what is known as the Labour Force of Assam for the last nine years, since the introduction of the system of 1882. The period in question opened with 210,186 labourers, and closed with a balance of 437,411. The mean annual increase has been at the rate of about 7·6 per cent., though, as indicated by the figures, the progress has not been by any means regular. In order to explain more fully what is meant by the terms Additions and Reductions, as used in the statement, the details for the last year of the decade are reproduced below *in extenso*:—

| YEAR. | Balance from Preceding Year. | Additions. | Reductions. | Net Increase. |
|---|---|---|---|---|
| 1883 | 210,186 | 121,850 | 94,632 | 27,218 |
| 1884 | 239,273 | 138,407 | 101,601 | 36,806 |
| 1885 | 276,865 | 113,201 | 100,983 | 12,218 |
| 1886 | 289,083 | 106,353 | 91,478 | 15,075 |
| 1887 | 304,158 | 118,504 | 97,562 | 20,942 |
| 1888 | 324,100 | 125,393 | 95,227 | 30,166 |
| 1889 | 354,266 | 134,585 | 98,383 | 36,202 |
| 1890 | 390,468 | 111,316 | 93,634 | 17,682 |
| 1891 | 408,140 | 124,584 | 95,313 | 29,271 |
| Average | 310,728 | 123,129 | 96,976 | 25,064 |

| | |
|---|---|
| Labour force remaining at end of 1890 | 408,140 |
| Additions:— | |
| Imported, by Contractors, Agents, or free | 49,908 |
| Local Contracts under the Act | 19,313 |
| Received from other Gardens | 6,370 |
| Recaptured deserters | 483 |
| Remaining after contract is expired | 16,482 |
| Otherwise obtained | 20,471 |
| Births | 11,557 |
| Total | 124,584 |
| Deductions: | |

| | |
|---|---|
| Deductions :— | |
| Transferred to other Gardens | 4,383 |
| Left, on expiry of contract, or with leave | 52,267 |
| Deaths | 15,832 |
| Desertions | 12,748 |
| Free labour put under contract | 9,278 |
| Contracts cancelled, redeemed, or dissolved, under the Act | 805 |
| Total | 95,313 |
| Net Increase during year | 29,271 |
| Grand total at close of year 1891 | 437,411 |

The recruitment during the 10 years is set forth in the margin. The statement shows that from an average of 32,000 per annum in the first five years the rate increased to one of 44,880 in the last. The greatest activity was manifested by the free labour, which it has been the consistent intention of Government to foster. The contractors' efforts come next in increased results, whilst those of the Sardar, or agents of the individual estate-owner, though still the highest in absolute numbers, have not shown the same tendency to expand that has been remarked in the two other cases.

| Year. | Adults. | | | Children. | Total. |
|---|---|---|---|---|---|
| | Sardari (Estats' Recruiters). | Contractor. | Free. | | |
| 1882 | 9,221 | 7,177 | 2,787 | 3,374 | 22,559 |
| 1883 | 10,805 | 9,981 | 5,604 | 5,748 | 32,138 |
| 1884 | 16,362 | 9,280 | 7,165 | 12,764 | 45,511 |
| 1885 | 8,676 | 6,583 | 5,885 | 8,254 | 29,398 |
| 1886 | 9,092 | 7,263 | 6,630 | 8,179 | 30,894 |
| 1887 | 10,237 | 11,402 | 7,451 | 7,373 | 36,463 |
| 1888 | 12,436 | 10,165 | 10,716 | 12,976 | 46,293 |
| 1889 | 15,277 | 9,522 | 12,749 | 18,110 | 55,658 |
| 1890 | 7 291 | 10,082 | 8,832 | 9,875 | 36,080 |
| 1891 | 9,241 | 16,071 | 12,627 | 11,969 | 49,908 |
| Average | 10,858 | 9,753 | 8,018 | 9,862 | 38,491 |

These immigrants are recruited from the tracts shown in the following table, which contains the details for adults only :—

| Year. | Lower Bengal. | N.-W. Provinces, Oudh and Bihar. | Chutia Nagpur. | Madras. | Assam. | Elsewhere. |
|---|---|---|---|---|---|---|
| 1882 | 3,727 | 5,505 | 8,980 | 590 | — | 147 |
| 1883 | 5,105 | 8,591 | 11,577 | 370 | 271 | 476 |
| 1884 | 7,736 | 7,533 | 16,795 | 218 | 399 | 66 |
| 1885 | 4,542 | 5,445 | 9,790 | 80 | 1,228 | 59 |
| 1886 | 3,649 | 5,934 | 12,160 | 189 | 685 | 98 |
| 1887 | 3,901 | 7,496 | 16,385 | 160 | 1,031 | 117 |
| 1888 | 4,408 | 7,995 | 20,252 | 285 | 348 | 29 |
| 1889 | 5,334 | 7,860 | 22,877 | 689 | 731 | 57 |
| 1890 | 3,475 | 6,082 | 13,162 | 1,895 | 1,483 | 108 |
| 1891 | 4,800 | 13,745 | 16,557 | 2,018 | 564 | 255 |
| Total during 10 years | 46,677 | 76,186 | 148,535 | 6,494 | 6,740 | 1,412 |
| Total in Assam during 1891 | 58,273 | 53,826 | 130,623 | 6,434 | 13,344 | 815 |

| Per-centage. | |
|---|---|
| Bengal | 16·3 |
| Chutia Nagpur | 52· |
| N.-W. Provinces, Oudh and Bihar | 26·6 |
| Madras | 2·3 |
| Assam | 2·4 |
| Elsewhere | 0·4 |
| | 100·0 |

**Regulated Emigration to Assam.**

The class of labourers most in favour is that of the forest tribes of Chutia Nagpur, who, with the Santhals, are known in the market as "first-class Junglies," by reason of their comparative immunity from the malarious fever which in this Province proves so fatal to most strangers. Being aware of this preference that persons from the open country of the plain, who may be desirous of getting engaged, resort, it is said, to the hills for the purpose of being recruited there. The existence of this practice seems to be confirmed by the mortality return, which, in the case of natives of Chutia Nagpur, shows too high a rate to justify the fever-proof reputation attributed to this population by those who indent on it for labourers. The Census return, too, of the castes of the people shows that the statement is not without some foundation. Next to this part of Bengal, the most favoured recruiting ground is Bihar and the adjacent tracts under the Government of the North-West Provinces, as in the case of Colonial emigration. But this class is not found to be as suited to the climate of Assam as the dark races of the hills or even the races of Lower Bengal. Immigration from Madras is confined to the northern districts of Ganjam and Vizagapatam, the same that furnish Burma with its recruits. It is only within the last four years that recruitment has been sanctioned in this tract, where it seems to have been more successful than amongst the neighbouring population of Orissa. Ten years ago the Census return contained only 753 natives of this Province, whereas that of 1891 rose to 10,654. The corresponding number from the North-West Provinces and Oudh showed but a comparatively small increase, and it is stated that the reason for the preference is that the races enlisted in the northern coast tracts of Madras are similar in physique and constitution to those of the hills of Chutia Nagpur.

**Mortality amongst Emigrants.**

This introduces the question of mortality amongst this class of labourer, the high rate of which was one of the grounds for the amendment of the law on the subject of inspection and sanitation generally. It has been ascertained that the excessive rate prevails almost exclusively amongst the newly arrived immigrants, so that it varies with the number imported during the year. This will be seen very clearly if the annual recruitment and the death-rate be plotted out by diagram. Except during the years 1886 and 1887, the two curves correspond very closely.

| Year. | Deaths per 1,000 amongst :— | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Recruits from :— | | | | |
| | Imported Labourers. | Free Labourers. | Total. | Assam. | Bengal. | Chutia Nagpur. | N.-W. Provinces and Bihar. | Madras. |
| 1882 | 67·9 | 29·3 | 39·4 | – | 31·6 | 41·1 | 45·8 | – |
| 1883 | 61·5 | 30·0 | 42·3 | 27·6 | 33·8 | 43·3 | 54·4 | 51·7 |
| 1884 | 58·9 | 29·5 | 42·9 | 18·7 | 36·9 | 47·1 | 48·0 | 44·7 |
| 1885 | 51·5 | 26·5 | 37·8 | 11·3 | 34·9 | 38·7 | 47·1 | 36·7 |
| 1886 | 58·9 | 29·5 | 41·8 | 16·9 | 36·1 | 45·2 | 49·2 | 50·4 |
| 1887 | 57·2 | 25·8 | 38·9 | 12·7 | 30·8 | 43·7 | 46·4 | 28·0 |
| 1888 | 62·9 | 30·2 | 43·2 | 11·3 | 33·9 | 52·9 | 44·7 | 29·9 |
| 1889 | 63·5 | 35·6 | 46·9 | 14·5 | 38·4 | 53·2 | 50·8 | 47·9 |
| 1890 | 55·6 | 28·8 | 39·7 | 17·6 | 29·0 | 45·0 | 43·0 | 56·6 |
| 1891 | 49·8 | 34·1 | 40·5 | 18·3 | 32·1 | 41·1 | 51·9 | 56·4 |

The worst lives are those of the natives of the North-West Provinces and Oudh, with Bihar, who generally emigrate in weak health, and arrive in their new surroundings still further pulled down by the much longer journey they have had to undertake than those from Bengal. Then, again, the acclimatisation in question is not one merely of atmosphere and rainfall, but of food and habits generally, and the change is far less extensive or sudden in the case of the inhabitant of Bengal than to him of the dryer plains of the Ganges Doab. The marginal return above gives the death-rate of adults amongst the labourers and their families according to to the different recruiting fields. It will be seen that the nearer the latter is to Assam the lower the rate. Assam itself, which may be said to furnish selected lives only, stands first; then comes Bengal. Chutia Nagpur follows, in spite of the supposed ability of its inhabitants to withstand the effects of the Assam climate. The reason for this incongruity has been stated above. The number of immigrants from Madras was too small until within the last two years to render the rate of much significance,

Regulated Emigration to Assam.

significance, but the figures for 1890 and 1891, since the resumption of recruiting in Ganjam, confirm the experience of previous years and amongst labourers from other parts of the country, that it is the newly-arrived that suffer. The difference between the mortality of labourers under the Act and that of non-regulated immigrants is partly attributable to the more complete registration of the former, and partly to the fact that in the drafts sent up by contractors, people from the North-West Provinces and Bihar, where recruiting is easy, are in a far higher proportion than the inhabitants of Chutia Nagpur or the Santhal country, amongst whom the ratio of the physically unsuited is considerably lower. In several years of the above series epidemic outbreaks of cholera and small-pox, and of the specially local disease now known as "anchylostomiasis," occurred, and have to be taken into account when the health of an estate is under consideration with reference to the sanitary provisions of the Act. The rise of mortality during the last year of the decade under review, as shown in the above table, is due firstly to the prevalence of cholera in some parts of the Province, and, again, to an unusually heavy importation of labourers from the North-West Provinces, Oudh and Bihar. On the other hand, improvements in the method of treating anæmia and anchylostomiasis in their local developments, have been attended with highly encouraging results. Nevertheless, the proportion of gardens classed as unhealthy, because the mortality on them during the year exceeded 7 per cent., slightly increased, as can be seen from the marginal table, and the deterioration is found in all districts except Sibsagar and Lakhimpur. The present law, however, can only be put in force when the mortality exceeds the above limits amongst the labourers imported under the Act, irrespective of the rate that may prevail amongst the staff engaged in other ways. An extension of the provision is proposed, accordingly, in the Bill now under consideration, whereby the protective measures can be more widely enforced.

| District. | 1890. Gardens. | | | 1891. Gardens. | | |
|---|---|---|---|---|---|---|
| | Total. | Unhealthy. | Proportion. | Total. | Unhealthy. | Proportion. |
| Cachar - - - | 187 | 12 | ·065 | 187 | 25 | ·134 |
| Sylhet - - - | 115 | 11 | ·095 | 118 | 12 | ·102 |
| Kannup - - - | 89 | 8 | ·089 | 50 | 6 | ·120 |
| Daneng - - - | 89 | 9 | ·101 | 89 | 15 | ·168 |
| Nowgong - - - | 61 | 5 | ·081 | 59 | 8 | ·135 |
| Sibsagar - - - | 215 | 27 | ·125 | 224 | 12 | ·054 |
| Lakhimpur - - | 151 | 15 | ·099 | 145 | 11 | ·076 |
| Total - - - | 907 | 87 | ·095 | 872 | 89 | ·102 |

## Other Inland Migration.

Other Inland Migration.

The migration hitherto treated of has been conducted under some special arrangement by which its nature and extent can be measured. The State either supervises the contract, or registers the number of people leaving the shores of India or engaged in a special industry. But what may be termed the ordinary, or casual, internal migration of the population can be appreciated in the Census returns alone, and there on none but very general lines. There are certain movements, however, which are better defined than the rest by their direction and their seasonal regularity. Among them may be mentioned that towards Bombay, between the months of September and June, when labour is in brisk demand in both factories and docks. Only 25·04 per cent. of the population of the city was born within its limits, and nearly 60 per cent. came from the adjacent mainland. By far the greater proportion of the latter contingent was from the comparatively poor district of Ratnagiri and the dryer portion of Satara and Poona. The movement is confined to the lower classes, who, as soon as they have made what they can, or the harvest prospects in their native villages seem favourable, return to their home for the rainy season. The improvement of communications during the last decade has resulted in the decrease in the proportion of women accompanying their husbands to the capital for work, to which result also the favourable conditions of the same period are

OTHER INLAND MIGRATION.

said to have contributed, as there was less reason for the whole family to join in labouring for its support. The number of persons who take part in this temporary migration is estimated at not far from 450,000. Something of the same sort is going on in the eastern capital of India, where jute takes the place of cotton in the factories, and the shipping season is as extensive in its requirements as in Bombay. It is clear, though, from the returns, that the labouring population of Calcutta is far more permanently settled in the city than that of Bombay, and, as in Assam, it is chiefly to Bihar and the adjacent districts of the North-West Provinces that the seasonal visitors belong. Contrary to what has taken place in Bombay, the ratio of those born in the city itself has risen in Calcutta during the decade, but probably a portion, and not a small one, of the increase is merely due to the extension of the municipal limits. Even now, only about 30 per cent. of the population falls within the category of the city-born, but considering the advantages possessed by this city in the form of suburban extension, this small proportion is not surprising. Throughout the rest of India there is but little real migration, though during harvest there is considerable movement in the population. The Census returns show that over 90 per cent. of the people were born in the District or State in which they were residing on the night of the Census, and that 6 per cent. more were from the immediately adjacent territory. In this 6 per cent., too, the excess of women, amounting to 37 per cent., indicates that no migration has taken place, but merely the interchange of children in marriage, under the operation of the rules of clan exogamy that prevail amongst Hindus. Thus, only 3·39 per cent. of the population remains to be accounted for, and this balance constitutes the real amount of immigration that is traceable. The following table, taken from the Census results, gives the territorial variations in the distribution of the inhabitants by birthplace. In Assam, Burma, Coorg, and to a small extent in Bengal, immigration from a distance is apparent; elsewhere the proportions depend a good deal on the complexity of the frontier line.

| PROVINCE OR STATE, &c. | Mean Number per 10,000 of Population. | | | | | | Mean Number of Females per 1,000 Males. | |
|---|---|---|---|---|---|---|---|---|
| | Born in India. | | | Born in Asia beyond India. | | In other Continents. | | |
| | In District or State where enumerated. | In contiguous Districts or States. | In non-contiguous Territory. | Contiguous Countries. | Remote Countries. | | Born in District or State. | Born in contiguous District or State. |
| Madras and States | 9,601 | 313 | 83 | 1 | — | 1 | 1·011 | 1·221 |
| Bombay and States | 8,808 | 683 | 496 | 2 | 8 | 8 | ·946 | 1·452 |
| Sindh and Khairpur | 8,824 | 809 | 325 | 25 | 5 | 12 | ·854 | ·727 |
| Bengal and States | 9,142 | 391 | 442 | 23 | — | 2 | 1·025 | 1·044 |
| N.-W. Provinces and States | 8,910 | 886 | 200 | 1 | — | 4 | ·860 | 1·926 |
| Oudh | 8,911 | 933 | 152 | 1 | — | 3 | ·902 | 1·565 |
| Panjab and States | 8,692 | 922 | 320 | 56 | — | 10 | ·899 | 1·218 |
| Upper Burma | 9,289 | 365 | 307 | 9 | 20 | 9 | 1·136 | ·860 |
| Lower Burma | 8,141 | 499 | 1,293 | 17 | 38 | 12 | 1·002 | ·664 |
| Central Provinces and States | 8,664 | 1,079 | 254 | 1 | — | 2 | ·996 | 1·108 |
| Assam | 8,868 | 262 | 845 | 23 | — | 2 | ·980 | ·665 |
| Berar | 7,678 | 1,814 | 505 | 3 | — | — | ·925 | 1·159 |
| Ajmer | 7,996 | 1,382 | 612 | 2 | — | 8 | ·832 | 1·425 |
| Coorg | 6,942 | 2,768 | 280 | 2 | 1 | 7 | ·950 | ·552 |
| Haidrabad | 9,054 | 575 | 362 | 2 | 4 | 3 | ·952 | 1·211 |
| Baroda | 8,629 | 1,026 | 343 | 1 | — | 1 | ·868 | 1·720 |
| Mysore | 9,219 | 533 | 241 | — | — | 7 | ·994 | 1·062 |
| Kashmer | 9,726 | 262 | 4 | 8 | — | — | ·877 | 1·089 |
| Rajputana | 9,120 | 724 | 155 | 1 | — | — | ·840 | 1·902 |
| Central India | 9,271 | 609 | 116 | 1 | — | 3 | ·899 | 1·218 |
| TOTAL, India | 9,038 | 623 | 316 | 17 | 2 | 4 | ·947 | 1·370 |

The last topic that need be mentioned in connection with the migratory tendencies of the population is the interchange between the two main political

political divisions of India, that directly under British administration, and that under the rule of native Chiefs. Unfortunately, the *data* on this point in the case of small States like those attached to the Governments of Madras and Bengal or to the administration of the Central Provinces are defective, owing to the frequency with which the name of the surrounding Province was returned, instead of that of the State. Deducting these three collections of States for the above reason, the remainder shows, on the whole adjustment, about 140,000 people received by British districts in excess of the number sent by them to native States. OTHER INLAND MIGRATION.

## B.—THE CONDITION OF THE PEOPLE.

In dealing with this extensive and complex subject, it is impossible to consider India as a single country, but it should rather be taken as a continent, or aggregate of countries, such as in fact it is in anything but merely a political sense. If the condition of the people of Europe were under discussion, it would be necessary to discriminate between Belgium, for instance, and Epirus or Norway, and even in the case of a single political unit, like Italy, Lombardy would have to be considered apart from the Abruzzi. In India the circumstances are quite as varied, and what with differences in race, climate, soil, and other factors, the standard of living alters so from tract to tract throughout the country, that it is next to impossible to adopt lines of economic cleavage that would be altogether mutually exclusive. Poverty and abundance are terms as relative in their significance in India as elsewhere. The requirements in the way of clothes, food, housing, and cultivation in the soft and equable climate of the coast tracts, are very different from those in the dry extremes of heat and cold that have to be provided against by the peasant of the Panjab. Still less rational is it to compare, as is sometimes done, the standard and cost of living in India, a tropical country, where social rank and position is hereditary, and all is regulated by custom, with those in western countries, where house-rent is a serious item, fuel is not required for cooking only, and position is a matter of competition. CONDITION OF THE PEOPLE.

In the following pages, therefore, each province is taken separately, and the condition of its population discussed in the light of information furnished by local investigation conducted through both Europeans and natives of the country. It is neither practicable or advisable to compress *data* of this sort within the four corners of a tabular statement, so no special form of review has been adopted, and the circumstances of each province are dealt with in the way best suited to local peculiarities of climate, tenure, or cultivation. In following this method of treatment points of difference and agreement between the provinces are rendered more or less discernible, so an attempt is made in the following summary to give, as far as possible, a general view, based on the more salient features of importance thus brought to light.

The first preliminary in dealing with this subject is to ascertain the distribution of the population according to occupation or means of subsistence. The Census returns give the results shown below. It must be noted that the proportions in question are not those of the workers only, but of the total population supported by each occupation or out of each source of income. Thus the whole community is brought on to the record. Occupation.

| | Percentage on Total Population. | | Percentage on Total Population. |
|---|---|---|---|
| I. Administrarion | 1·95 | XIII. Provisicn of metals and precicus stones | 1·33 |
| II. Defence | 0·23 | XIV. „ „ glass and earthenware | 0·82 |
| III. Service of Foreign States | 0·18 | XV. „ „ wood, cane, &c. | 1·50 |
| IV. Pasture | 1·27 | XVI. „ „ drugs, gums, &c. | 0·14 |
| V. Agriculture | 59·79 | XVII. „ „ leather, hides, &c. | 1·14 |
| VI. Personal and domestic service | 3·91 | XVIII. Commerce | 1·63 |
| VII. Provision of food, drink, &c. | 5·07 | XIX. Transport and Storage | 1·38 |
| VIII. „ „ light, fuel, forage, &c. | 1·23 | XX. Learned and artistic professions | 1·97 |
| IX. „ „ buildings | 0·50 | XXI. Sport, games, &c. | 0·05 |
| X. „ „ vehicles and vessels | 0·05 | XXII. Earthwork and general labour | 8·87 |
| XI. „ „ articles of supplementary need | 0·40 | XXIII. Indefinite means of subsistence | 0·54 |
| XII. „ „ textile fabrics and dress | 4·39 | XXIV. Independent of work | 1·66 |

CONDITION OF THE PEOPLE.

The preponderance of agriculture is fairly well shown in the above return, but when the peculiar constitution of Indian society is considered, it will be found necessary to go into a little more detail before the full importance in that country of this mode of getting a livelihood can be appreciated. For instance, 85 per cent. of the total population, or 88, if the towns be omitted, is engaged in some 20 occupations only, as shown in the margin, and nearly every one of these is remunerated either by a grant of land out of the village demesne, or by a share in the crop of those who employ him. The addition of ten more occupations almost completes the list, and of these there are two or three which are intimately connected with the land.

| OCCUPATION. | Percentage of each Occupation on the Total Population. | Percentage of each Occupation on the Rural Population. |
|---|---|---|
| 1. Landholders and tenants | 52·98 | 57·06 |
| 2. Agricultural labourers | 6·50 | 6·93 |
| 3. General labourers | 8·87 | 8·77 |
| 4. Graziers, shepherds, and wool-workers | 1·45 | 1·49 |
| 5. Cotton workers | 3·07 | 2·75 |
| 6. Goldsmiths | 0·62 | 0·50 |
| 7. Blacksmiths | 0·55 | 0·52 |
| 8. Brass and coppersmiths | 0·14 | 0·10 |
| 9. Carpenters | 1·06 | 0·96 |
| 10. Masons | 0·36 | 0·24 |
| 11. Barbers | 0·90 | 0·89 |
| 12. Washermen | 0·72 | 0·71 |
| 13. Fishermen | 0·95 | 0·94 |
| 14. Oil pressers | 0·69 | 0·69 |
| 15. Potters | 0·82 | 0·81 |
| 16. Village servants | 1·07 | 1·13 |
| 17. Leather workers | 1·14 | 1·09 |
| 18. Scavengers | 0·40 | 0·35 |
| 19. Priests | 0.60 | 0·56 |
| 20. Mendicants | 1·95 | 1·78 |
| TOTAL, PRIMITIVE | 84·84 | 88·26 |
| 21. Milk sellers | 0·35 | — |
| 22. Grain and pulse dealers | 1·10 | — |
| 23. Shopkeepers | 0·88 | — |
| 24. Money lenders | 0·34 | — |
| 25. Grocers | 0·74 | — |
| 26. Tailors | 0·42 | — |
| 27. Piece-goods dealers | 0·32 | — |
| 28. Toddy drawers | 0·35 | — |
| 29. Cane workers | 0·50 | — |
| 30. Grass and firewood sellers | 0·47 | — |
| TOTAL, SUPPLEMENTARY | 5·47 | — |
| Others | 9·69 | 11·74 |
| GRAND TOTAL | 100·00 | 100·00 |

The concentration of so high a proportion of the people on to the soil as the sole or chief means of subsisting, is, on the whole, the most important factor in the condition of the population of India, and its tendency is one to which nature has set very obvious bounds. There is, in the first place, the limitation of space, or of extension of cultivation, and, then again, that of productiveness, or, what is known as intension, of agriculture. In neither case have the bounds yet been reached in India, though there are tracts where they have been closely approached.

Area under cultivation.

The extent to which cultivation is spreading cannot be statistically determined at present in all the provinces, owing to differences in tenure of land, progress of surveys, and other disturbing elements. Such evidence as there is, however, goes to prove that the land is being rapidly taken up wherever the available area has a fairly certain rainfall, and is contiguous to that already in occupation. The progress is most marked, as is to be expected, in the thinly peopled tracts that fulfil the above conditions. In Lower Burma, for instance, the increase is returned as amounting to 45 per cent. in the last ten years, under the stimulus of the demand of rice for exportation. Here the land lies within easy reach, and the population is remarkably homogeneous in religion, race, and language. In Assam, where the conditions are equally favourable, but the character of the people different, the increase in the same period was but 8 per cent. Coorg returns an expansion of 12 per cent. The Madras inquiry reaches back 40 years, during which period the unirrigated land under cultivation increased by a third, and the irrigated in more than double that proportion. In Sindh and the Panjab, the extension of tillage depends upon that of the means of irrigation. In the former the area varies from year to year with the character of the inundation; in the latter wells are largely used, and have been increasing in number of late. The area under crops in 1891-92 exceeded that of ten years ago by 22 per cent. in the Panjab, and 28 per cent. in Sindh. The Central Province revenue settlement took place in 1867, and since that date the cultivated area has grown in the same proportion as that in Sindh in the decade. For Bombay there are no comparable returns, by reason of the continual bringing on to the record of lands newly surveyed, but the increase in the area in question is probably considerably less in proportion than that in the provinces just mentioned. For Bengal there are no returns, except for the detached estates under direct administration, but the increase is known to have been considerable in the north and east, and probably, too, in Orissa. In the North-West Provinces and Oudh the ten years under review seem to have been characterised by no appreciable extension of cultivation, if the Province be taken as a whole, since the considerable area of fresh land that has been broken up in the east and north-east must be set off against a large area that has been abandoned

abandoned in the west. In Berar, again, it seems as if the cropped area were not spreading, but in this case it is necessary to mention that the present area not only provides for the population within the province, but exports large stocks to its neighbours. CONDITION OF THE PEOPLE.

The next point for consideration is how far the population of the present day is pressing on the land, and what are the most accessible means of relief, where any is wanted. Congestion is, of course, a relative term, and by no means commensurate with density of population. Of the former there are two prominent instances in India, and these are also probably the only two of acute congestion. One is the case of North Bihar, where the density amounts to 667 per square mile; the other is that of the Ratnagiri district in the Bombay Presidency, where the density is only 282. In the former, with a fertile soil and good climate, the difficulty is due to social causes mainly, such as the habit of minute subdivision of estates, of universal and early marriage amongst both sexes, and a strict caste system. In the latter fertile ground is scarce, the rainfall, though heavy and certain, is concentrated into a few months, so that cultivation cannot be varied or extended, and the tenure is unfavourable to the lower classes of agriculturists. There are signs of approaching repletion, too, in the submontane tracts of the Panjab, in the Narbada Valley of the Central Provinces, and in the south-east of Oudh and the sister province. Congested tracts.

In discussing the extension of the area under cultivation as a means of relief in such cases, so long as there is any room left for expansion at all, the idiosyncrasies of the people concerned are the chief matters to be considered. It is notorious that the Indian peasant is peculiarly sensitive to change of climate, food, and water, so that merely from physical causes, his advance from an open and comparatively healthy plain in which he is thoroughly acclimatised to a clearing in a malarious, damp, and badly drained jungle, however fertile the soil may be, is inevitably accompanied at first by ill-health and loss of life. Then, again, there are social and moral objections that are not to be underrated. The peasant has no reluctance to move on in line with his fellows, keeping in touch with a common centre; but, like every other agriculturist, he is strongly averse from complete uprooting of his old associations. In India these objections are especially strong, owing partly to the religious, partly to the marriage system, and partly, again, to the great variety of race and language that meets the wanderer at every stage of his progress. With a strong backing of his own people to maintain the line of communication with his old home, he may perchance face the outer world, but a range of hills or a belt of forest places him amongst strange men, worshipping strange gods with unknown ceremonial, speaking a dialect unintelligible to him, and, if the tract be a wild one, gifted, he believes, with powers of magic and witchcraft which none from the plains can withstand. It is thus impracticable to transport any considerable body of people to a distance from their home if the intervening country be, according to Indian notions, a foreign one. The advance on the forest and hill country is almost invariably initiated by the lower classes, who are nearer akin than the rest to the wild tribes whom they gradually displace. The middle class follows, and pushes its predecessors further into the waste, and so on. In many of the provinces where there are still large tracts of land to be colonised, the process of expansion is easy enough. In Burma and Sindh there is certainly no difficulty. In the Panjab, what there is has not been found insurmountable. In the submontane belt of Oudh and the North-West Provinces also the expansion has been that of contiguous communities. In the Assam Valley the stranger from parts of Bengal and Oudh has in many cases elected to settle in his new abode after his term of service on a tea estate has expired, and the Santhal has been similarly transplanted in small numbers to the sub-Himalayan forests. In other provinces, land thus conveniently situated, and of no less fertility than that already in occupation, is, no doubt, to be found, but only in a few tracts, where it often requires much time and labour to bring it under the plough. The Agency tracts in north-east Madras and the Malabar district on the west coast are examples of this. In the Bombay Presidency most of the land of good quality still to be got lies in the comparatively wild tract of the Panch Mahals and in Khandesh, in the latter of which districts it is being rapidly taken into occupation. In the Central Provinces there are large tracts of land that is, no doubt, arable, and as suited to cultivation as much that is Relief by expansion.

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now in use, but which it is necessary to keep under timber, either for the supply of the neighbourhood or in consideration of the climatic advantages gained by maintaining a well-wooded belt of country above plains denuded of permanent vegetation to make room for crops. The area still available for colonisation outside these forest reserves is by no means large, though it has been the habit in some quarters to regard the tract under this Administration as a sort of backwater to carry off the surplus population of the Gangetic basin, not taking into account the rapid growth of the local population, irrespective of immigration. In the Ganges Valley itself there is but little chance of extension of cultivation over really good soil, except in the Champaran district of Bihar and the sub-montane tracts of Oudh and the North-West Provinces. Large areas are lying unoccupied along the Jamna, where the soil is, at least for the present, waterlogged, and amongst the southern hills of what is known as the Bundelkhand tract, where the quality is inferior and the rainfall uncertain. As regards the arable waste situated in the midst of land in occupation, it is exceptional to find it of equal fertility to the rest. In some of the districts of Madras and Bombay that lie within the zone of uncertain rainfall this exception is found to prevail, as the season is too precarious to attract small occupants or to induce the larger landholders to extend their estates, so land is available, in considerable quantities, which promises to be as remunerative as the present cropped area. But the general rule where the village system prevails is for the exploitation of the village lands to begin from the inhabited site as centre, and to take in the outlying fields under centrifugal pressure, leaving none but the relatively undesirable portions for future occupation or for outsiders. Thus, on the one side there is Assam, where the competition is that of the landlords for tenants; on the other, Bihar and parts of Oudh, where the demand for land is so keen that rack-renting is everywhere possible, and almost universally practised. Midway comes the bulk of the country, where there are few tracts without a certain waste area left for future cultivation, though it is generally of inferior quality to that at present in hand.

Area available in the Protected States.

It has been suggested from time to time that a large field for immigration is available in the territory under the native Chiefs, where the density of population is less than half that found to prevail in the British provinces. A reference to the census results, however, will show that the difference, taking the country as a whole, is less than is represented by the above figures. The mean density of the Provinces is due in a great degree to the concentration of population in the Ganges Valley, whilst that of the States rests largely on the sparsity of the inhabitants in the deserts of Rajputana and the mountains and tablelands of Kashmer, in neither of which is there room for great expansion of cultivation. The Malabar States, Baroda and its neighbours in Gujarath, and the larger Sikh States of the Panjab, return about the same specific population as the surrounding British districts. The east of Rajputana is in much the same stage, and falls within a region unfortunate in its seasons, whilst a great portion of Haidrabad and Mysore is no better off. The census shows that, even making all allowances for the increase in population that is merely nominal and due to more accurate enumeration, the better administration of these States during the present generation is producing results in the same direction as that of the Provinces; so that, so far from serving as the outlet for the population of the latter, the Protected territory, or a great portion of it, will ere long have to face the same difficulties in providing for its increasing agricultural population as those with which some parts of the provinces have now to cope. On the other hand, Bhawalpur and the adjacent tracts of Rajputana, if irrigation be made possible; portions of Central India and perhaps the east of Haidrabad, if the means of communication be improved; and a good deal of Mysore, are open to colonisation to a certain extent. There remain the hill tracts under the petty Chiefs of Orissa, Chutia Nagpur, and the Central Provinces, which have still to be opened out, though, from the nature of the country, they cannot provide a large quantity of cultivable land compared to their total area, and will require colonisation by the lower grades of the community on the slow and partial system mentioned above, before the expert agriculturist of the plains is likely to venture into their hills and dales.

So

Increase of productive power of land.

So far, then, as regards the room for expansion and the provision for the wants of an increasing agricultural population by the extension of cultivation, there remains the other part of this question, namely, the alternative process of obtaining a greater yield from the land already in cultivation. Experts in scientific agriculture appear to be agreed that, stopping short of what would be called "high farming" in Europe, a good deal more could be got out of the land in India by improved methods of cultivation than is now obtained. It is superfluous to enter into the details of this question here, but there are some general considerations which are directly relevant to the present subject. For instance, the Indian cultivator is in no way behind his compeer elsewhere in taking advantage of any innovation, provided the profit thereof be proved to demonstration before his eyes. He is not, nor can any peasant be reasonably expected to be, an experimentalist. The issues of the struggle against the forces of nature are too serious to allow him to put his trust in unproved armour. Wheat has been, since the days of Megasthenes, an ordinary winter crop in the rotation of the Panjab cultivator. It was shown him that where he got nine bushels irrigation would give him 13, and now the cultivation of wheat is increasing commensurately with the extension of the State canal distributaries, and these latter have grown by 86 per cent. in the last decade. He has also learnt that watering means manuring, a second useful bit of information, considering the homœopathic doses of fertilising material which custom has prescribed in India. Foreign samples of cotton have been eagerly adopted, because their superiority was brought home to the Dharwar and Broach raiat in the local cotton-broker's yard. Jute has been spread over Northern and Eastern Bengal in like manner. In Coorg, no holding of any considerable size but has a corner reserved for coffee, a plant unknown in that little province a generation or two back. Many other instances could be cited of the introduction of a rent-paying crop under the influence of foreign demand whilst the rest of the estate was under food-crops. But, apart from the great increase in the variety of the produce that nowadays engages the attention of the cultivator and the great extension of the State system of canals which in many provinces renders that variety possible, one of the most noteworthy developments of agriculture of late years has been in the direction of cultivation under wells. This form of small tillage is one in which competent observers agree that the Indian peasant has little or nothing to learn from Europe. In the regions of uncertain rainfall, two or three acres commanded by a well provides vegetable or pulse for the family and forage for the cattle when the whole of the unirrigated land around it is bare of grain or grass alike. In the Panjab nearly four million acres are watered from wells, of which over 220,000 are of substantial masonry. In Madras the number of wells had more than doubled in the 40 years preceding 1889, and a great many were added under the system of State advances for their construction during the bad seasons of 1890 and 1892. In Bombay, the Deccan has been nearly equally fortunate in this respect, and Gujarath is expected to follow suit as the new and more favourable settlement rules come into operation. In the North-West Provinces and Oudh, again, wells are, as a rule, particularly valuable, though the soaking rain of the last two or three years has put them temporarily at a discount. There are now about 712,000 of them there, irrigating over five million acres. But there are many tracts in India where little use can be made of wells for irrigation, either because the subsoil water is brackish or because it lies at such a depth below the surface that the cost of sinking and working is prohibitive to all but the upper classes of agriculturists. Irrigation from one source or another has nevertheless advanced by 20 per cent. in the last seven years and extends to the same proportion of the area returned as under crops.

Irrigation from wells.

Another practice in cultivation that has increased in prevalence very remarkably in the last 10 years is that of taking more than one crop off a field in the year. In rice tracts this has been in vogue for a long time, and the autumn harvest is usually followed by a winter sowing of pulse, vetch, or oil-seeds. In lighter soils the practice is of later birth. On the whole, the area thus placed under requisition increased at about double the rate of the area taken into cultivation, and amounts now to about 12 per cent. on the latter, against 8 five years ago. In the North-West Provinces the rise was from 7 to 15 per cent. in 13 years. In Sindh and Madras the area was doubled in the same period, and in Bombay it rose by 28 per cent. In the Panjab, too, there has been

Double cropping

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been a notable increase. Improbable as it may appear, there is at present no evidence, that by this process the soil is being exhausted, as in most of the cases where a second crop is required of the same land rather more pains than usual are taken in regard to the manuring. On the other hand, the question requires further investigation, since the evidence at present available is not to be accepted as conclusive. But with regard to the general demand made on the soil in India, it is fairly clear that no signs of exhaustion have as yet been made manifest. A good example of this is found in the Meerut district in Upper India, where in 1836 Colonel Sleeman relates that he was told in conversation with a landholder of the upper class that of late years the harvests had been gradually diminishing in bulk. In 1886 the wheat of this same district bore a special reputation for excellence, and the railway stations have had to be enlarged more than once to meet the demands of a constantly increasing export trade, accompanied by all the other signs of advance in material prosperity that are usual in India in such circumstance. But there can be no doubt that with all its natural advantages the country would be all the more productive if the vast quantity of manure that is now allowed to waste were returned to the soil. There are signs, especially round the large towns, where small cultivation under wells is the rule, that market gardeners and those engaged with sugar cane and similarly valuable crops have begun to appreciate this fact, and to make use of fertilising substances, which in the last generation it would have been a matter of loss of caste not only to touch but even to employ in the production of food intended for orthodox consumers. With canals to enable crops to grow and ripen when the rainfall is insufficient either in quantity or distribution, and with wells for high cultivation on a small scale, with the double-cropping that these appliances tend to foster, and with the economy of animal and vegetable manure that characterises the farming of the best agriculturists in India, and is spreading from them downwards, the ability of the soil under the plough to support on the whole a very much larger population than that which now depends upon it can be confidently assumed.

Agricultural stock.

There is one point in connection with the above question which deserves notice here, and that is the increase in the stock of cattle, which has been commensurate with that of cultivation. The returns are not complete, as the statistics are not collected in Burma or the large Province of Bengal, but, so far as they go, they show an increase in the last six years of 35 per cent. This includes both draught and milch animals. The former have risen in value with the increased mileage of roads as well as in connection with the larger area under the plough. The latter will be mentioned again in connection with the food supply of the population. Unluckily, the custom of using the droppings of this vast multitude of animals for fuel and for washing on to walls and floors, instead of bestowing it directly upon the land, is one that shows no diminution, and is prevalent everywhere except in a few tracts where firewood is particularly cheap and plentiful, or where the land occupies an unusually high place in the householder's estimation.

Crops and food supply.

The next subject to be considered is the distribution of the area under cultivation between the various products of the soil. The marginal statement is based on the latest returns issued by the Government of India; but the figures for Bengal which were published separately are excluded as being based chiefly on estimates. Taking the rest, as a whole, from 78 to 90 per cent. of the area is under food-crops. Berar is an exception, for there only 45 per cent. comes into this category. It is not possible to distinguish between the food-crops grown for home consumption and those intended for export, because, with the exception of the millets, fruit and vegetables, most of the crops serve both purposes, and even millet is now exported to a certain extent from the west coast to Arabia, and even in small quantities to Europe. For instance, rice is practically the only crop grown in Lower Burma, and the quantity exported often equals that kept in the province for food. In Bengal, Madras, and Assam the exports are small compared to the amount consumed at home. Wheat, again, is a main article of food in the Panjab and part of the North-West

| Crops. | Area Cropped in 1891-92. | |
|---|---|---|
| | Acreage.* | Percentage on Total Area. |
| Wheat | 18,574,000 | 12·40 |
| Rice | 27,205,000 | 18·17 |
| Great millet | 20,133,000 | 13·44 |
| Spiked millet | 10,362,000 | 6·92 |
| Barley | 3,475,000 | 2·32 |
| Ragi | 3,052,000 | 2·03 |
| Maize | 3,157,000 | 2·17 |
| Gram | 8,068,000 | 5·38 |
| Other grains and pulses | 28,205,000 | 18·83 |
| Miscellaneous food crops | 1,737,000 | 1·16 |
| Flax | 2,687,000 | 1·79 |
| Sesamum | 2,132,000 | 1·42 |
| Other oil seeds | 3,679,000 | 2·45 |
| Sugar cane | 1,940,000 | 1·29 |
| Fodder crops | 1,758,000 | 1·17 |
| Cotton | 8,859,000 | 5·92 |
| Fruit and vegetables | 1,570,000 | 1·04 |
| Others | 3,145,000 | 2·10 |
| TOTAL Cropped | 149,738,000 | 100·00 |

* Excluding Bengal and parts of Madras and Assam.

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West Provinces, but in Bombay and the Central Provinces it is grown almost entirely for the foreigner. Cotton, too, is now largely made up in India, and only a portion goes abroad in its raw state. The same may be said of seeds, with the important qualification that as the use of vegetable oils in India is being superseded by that of imported mineral oil, the proportion of seeds available for export is on the rise, whereas the home demand for cotton tends to reduce the shipments for abroad. The general distribution of the cultivated area amongst the main products appears to be fairly balanced, in the present conditions of the country, between the interests of the producer, who is necessarily anxious to exploit his land to his own greatest advantage, and those of the non-producing consumer, who is concerned with the adequacy and accessibility of the outturn of food. These interests are obviously identical, so far as three-fourths, if not four-fifths, of the population are concerned, for this is about the proportion of the producers with those immediately dependent upon their harvests. In the not inconsiderable portion of the country where the chief exported produce is also an important, if not the principal, food of the population, the balance of the distribution adjusts itself automatically. In Burma, Orissa, and Eastern Bengal, for example, the cultivator disposes of just what rice he can spare after providing for his own needs, and in those fertile regions this surplus in an average year is a large one, but if the outturn be short of that average, the deficiency falls upon the exports. The case of wheat is a little more complicated, but in the provinces where it is the most widely grown, such as the Panjab and the Jamna valley, it appears from the returns of inland traffic that the same general tendency is in operation; for it is noticeable that in a year of brisk export of this grain the drain is not accompanied by an equivalent rise in the imports of other cereals, as would be the case if the normal food-supply of these tracts were being depleted. But the movement of millets, rice, and pulse is in general harmony with that of wheat, indicating that the outward tendency is the result of a bountiful harvest all round, and not consequent on the undue allurements of foreign trade. There is also the consideration that wheat enters, as a rule, into the regular rotation of Upper Indian husbandry, and the cultivator is slow to change in this important particular. In the Panjab there is the further safeguard against trespass on the area required for the production of the ordinary local food crops, that the great advantage of growing wheat under irrigation, as compared with the outturn from unirrigated land, leads the cultivator to reserve the latter for millets and pulses, and only to replace these by wheat when the summer and autumn rains have been unfavourable to the early harvest. In the wheat-growing tracts of Bombay and Berar the proportion of land under this cereal to the total cropped is relatively small. In the Narbada Valley of the Central Provinces, where it is more extensive, any objections there may be to the growth of wheat cultivation are not connected with the possible interference with the food supply, but are based on the nature of the tenure of the land, which favours competitive rental without equivalent profits to the cultivator. On the whole, then, the export trade in cereals has not been detrimental to the food supply of the country at large, whilst the additional cash value it has given to the produce of the land is distinctly beneficial to the agricultural community.

Amount and variety of the food supply.

As regards the general requirements of the population in the way of food and the amount available to meet them, a good deal has been written, based, for the most part, on large assumptions and insufficient information. The usual plan seems to be to estimate the yield of grain or pulse, or both, per acre, and to establish from other sources of information a mean daily ration, not always taking into consideration differences of kind and nutritive quality, though generally discriminating between the allowances for adults and children respectively. The next step is to multiply the acreage yield by the area under food-grains and pulses, and to then divide the product by the mean ration, if the object be to show the population for which the supply is sufficient, or to multiply the population by the ration, if the computation be intended to compare the actual supply available with that necessary to support the existing population. In this manner it is possible, of course, to prove to demonstration that a certain number of millions, 20, 40, or 60, as the case may require, must necessarily be almost, if not quite, foodless. It is superfluous to examine these estimates in detail. It has already been stated that nearly the whole population is concentrated on a single occupation the supporting power of which is dependent upon seasonal variations, and that in some parts of India these variations are extreme, so that there must inevitably

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ably be an unusually large proportion of the people subsisting on the margin of cultivation, whom a specially unfavourable harvest renders liable to succumb to ailments or diseases which in ordinary circumstances they would have successfully resisted. But regarding the food supply in general, as dealt with in such estimates, a few remarks will not be misplaced in this chapter.

In the first place, the area under fruit and vegetables is considerable, and with well irrigation is rapidly increasing. Even in dry soil, the poorest holdings often have gourds, cucumbers, &c., growing over the house, shed, or hedges, which are a favourite addition to the family meals. Milk, again, is part of the diet of every agricultural family in regions where cattle can be easily maintained, that is, everywhere except under the very heaviest rainfall, and the returns show a very large increase since 1884 in the number of cows and buffaloes, amounting in the tracts where the cattle are registered to some 35 per cent. The numerical relation between these cattle and the population cannot be determined, as so many villages that do not furnish returns are intermixed in the census tables with those for which information is available; but there appear to be approximately 45 to 50 head of horned cattle, counting calves, to every 100 people. There is then the important fact to be considered that all these estimates take into account vegetable food only, and ignore the very large proportion of the Indian population that habitually eat fish or flesh. The former is consumed along the coasts except amongst a small minority, and all up the larger rivers fish is found in every market. Over two and a half millions of people live by the provision of this article of food, and probably another half million should be added from amongst the boatmen. In Burma, fish, salted, pickled, and fresh, is universally used. The flesh-eaters are still more numerous, beginning with the 57½ millions of Musalmans. The Rajputs have no objection to mutton and goats' flesh, and are still addicted to the meat of the wild boar, a surfeit of which, unless an esoteric signification be attached to this savoury dish, proved fatal to the great Buddha, who was of the warrior caste. The Marathas follow suit in this respect, whilst the hill tribes extend their diet both above and below; for the lower grades are omnivorous, and the higher, such as the Naga, habitually save up money to buy a cow wherewith to make merry with their friends on the occasion of a domestic occurrence. Finally, in addition to the Native Christian converts, there are the very numerous communities of village menials, a sort of helots, descended, in all probability, from the pre-Aryan possessors of the plains. These have everywhere the bodies of the dead cattle of the community they serve as perquisites, and avail themselves of this privilege by feasting on the carcase, after despoiling it of its hide for tanning or sale. There are 12¾ millions of this class. The mean number of hides exported every year during the last decade, which has been over 30 millions, not to mention those used in the country in the manufacture of shoes, water bags, harness, and the like, shows what a supply of food is thus available. On the whole, without counting the classes that are but partially carnivorous, there must be, at a rough approximation, 130 millions out of the 287 who do not trust for their sustenance to cereals, vegetables, and milk alone. Then, again, that portion of the estimates framed on the plan mentioned above which rests upon the yield of food-grain per acre is of equally doubtful accuracy, and when the admittedly rough approximations of the Famine Commission are applied wholesale over the length and breadth of India, or even to one of its provinces, the result is little better than random conjecture. Year by year fuller information on this important matter is being acquired by means of experiments carried out on a uniform plan with different crops, under different conditions and in different parts of the country, and the variety of the results, useful as the latter are for local purposes, such as the revision of the assessment rates and so on, only serves to render more apparent the risk of making them the basis of wider generalisation. After a long course of such measurements it will probably be safe to strike a mean for a considerable tract, giving the approximate yield of each main crop grown within it on irrigated and unirrigated, manured and unmanured, soils respectively, and from this to form a fairly good notion of the average amount likely to be harvested during a cycle of years, but the conditions of agriculture in a considerable part of India are so variable that even in favourable circumstances the estimate might turn out inapplicable to the outturn of any single season. Great attention, however, is being paid to this matter by the Government of India in the Department of Agriculture, and the annual inquiries are improving in both number and quality. Finally, some consideration is due to the fact that the population is increasing and not stationary,

stationary, and that the lower classes seem everywhere at least as prolific as the rest, if not multiplying at a more rapid rate than their social superiors. If, therefore, deterioration in condition is the rule, it must have set in within very recent times indeed. To the argument of the existence of habitually-starving millions may be opposed simply the Galilean reply, "*Eppur si muove.*" Condition of the People.

But the present question is that of the adequacy of the food supply in general, not of the circumstances of any tract in particular. It is clear from what is already known of the annual cultivation that, taking the country as a whole, there is plenty of food for all its inhabitants, and hitherto the difficulty has always been to render the surplus stock of one part of India available to the full in supplying the need of localities in which the season has been less propitious. Speaking roughly, the meteorological observations that have been recorded indicate that, as a rule, two-thirds of India are affected each year in a similar manner, whilst the remaining third experiences a season tending in the opposite direction, but there is no record of a universal failure of crops from want of rain, any more than of a general harvest above the average. In days gone by, therefore, the want of means of transport resulted in the rotting on the ground of the overflowing yield on one tract, whilst the same produce was selling at famine prices elsewhere, but beyond reach. During the last 10 or 15 years, in pursuance of the general policy adopted by the Government of India for the protection of the country against the results of famine, or even of serious scarcity of food, railways have been constructed that bring all the chief tracts of practically certain rainfall into touch with those most liable to failure. Communication by road and canal also has been much improved in the same period, and all the chief stations are supplied with feeder roads to the surrounding markets. For every 100 miles of railway worked in 1880–81, there were in 1891–92, 186; for every 100 tons of goods carried in the former year, there were in the latter 198; and for every 100 passengers, 242. The returns prove that internal trade in millets, pulses, and other food-produce is no less brisk than that in wheat, cotton, oilseeds, and other staple commodities of the export traffic, and the movements of articles of luxury, such as sugar, tobacco, spices, &c., is very noteworthy in its development. The difficulty in distribution, mentioned above, has accordingly been to a very great extent removed. In some cases, a special demand has been met without serious dislocation of the ordinary market prices. In others, the facilitation of the supply has created or stimulated a demand. The steadying effect of the new order of things upon prices is, perhaps, the most prominent result of the extension of communications, and remarkable instances of it will be found mentioned in the provincial paragraphs below. Another result is the increased export trade thus made possible, which also has had its effect on the prices of produce, both being to the benefit of the cultivator. Indirectly, too, the approach of a railway has its special advantages to the peasantry. In the first place, in all the large and fertile producing-tracts it is noticed that it is accompanied or closely followed by the substitution of central markets—where the dealer or broker and the producer are brought face to face—for the village shopkeeper, who takes over the crop from the cultivator at his own valuation, which is not often that of the market at which he himself disposes of it. The villager is thus brought into touch with the outer world, learns the ways of trade, and pockets the profit on his bargains, instead of making a present of it to the petty dealer. Then, again, to the traffic between the stations and the markets of the interior is due the remarkable development of the carting industry that has been so noticed of late years. This is a matter which affects the poorer class of cultivator rather than his more fortunate companion; for the large holder of land has generally work enough for his stock on his own estate, whereas the small occupant often, if not usually, can only work a single harvest in the year. His pair of plough bullocks, therefore, used to be either out of work for nearly half the year or let to a neighbour at the lowest local rate. Now, however, with good roads and a railway within reach, the owner buys a cart and plies for most of the open season between market and station, or goes off to the nearest large town and keeps his cattle in work for five-sixths of the year at a remunerative tariff, since for distances of 30 miles and less, carts compete, as a rule, successfully against the railway. He then returns to his village in time to prepare his land for the earlier harvest. In these circumstances it is not surprising to find the number of carts and bullocks rapidly and, on the whole, continuously, increasing. Communications.

The improvement in the means of communication by the change it has effected in the balance of the food supply has necessarily resulted, also, in a revolution Prices of agricultural produce.

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revolution in the market prices of the principal commodities of trade. In connection with the subject of the material condition of the people, the prices that are of the greatest importance are those of agricultural produce on which the welfare of the masses so largely depends. The main effect on these of the great extension of railways that has characterised the last 10 years has been the steadying influence described above, which tends towards equalisation. In the tracts but recently opened out the price of produce has obviously risen in accordance with the intensity of the need of the surplus elsewhere, if for no other reason. Throughout the region of uncertain harvests, under the same qualification, the wild seasonal fluctuations of the past have been restrained within relatively moderate limits, and it is no longer within the power of the local dealers to maintain the abnormally high "famine prices" of a generation back. But this influence alone is not sufficient to account for the general, as opposed to the local, rise that appears to have taken place in the price of food-grain and pulses, which is probably attributable to some such far-reaching cause as the expansion of the currency or the depreciation of silver. Whatever the cause, the results to the cultivator may be appreciated from the fact that in the North-West Provinces, produce that sold for Rx. 100 in 1861–65 now fetches Rx. 167. In the Central Provinces, since 1858–63, the price of rice has trebled, and that of wheat, millet, and pulse more than doubled. In Burma rice has doubled in its cash value since 1881–82.* In Assam it has risen by some 40 per cent., and from 6 to 20 per cent. in Bengal. The rise of prices of produce generally in the Panjab has been about 30 per cent. in the last 10 years. The staple food of Berar fetches Rx. 186 where 10 years ago it brought the producer only Rx. 100. The local variations in Bombay, like those in Bengal, are numerous, owing to the different circumstances of the extremes of the province, but the rise has been general for every description of food crop. The Madras prices, again, show a wide range, as is to be expected from the difference between the coast climate and that of the uplands. In discussing the circumstances of this Presidency, *data* are available for the last 40 years, and from these it appears that in the lower tracts the quantity of rice that was sold for Rx. 100 in the period 1849-53 fetched Rx. 234 during the five years ending with 1888, and Rx. 287 in the period of four years ending with 1892. Millet, the representative grain of the middle-class cultivator of the interior, rose from Rx. 100 to Rx. 189 in 1884–88, and, in spite of importations, to something considerably over that figure in the hard times of 1889–92. The prices obtained for the produce not used for food, and which is now very largely grown for the foreign market, also rose in proportion, except in the case of cotton, which fluctuates more than the rest and has shown no marked upward tendency of late. On the other hand, the development of the demand for jute, oilseeds, ground-nuts, and the like, has been a great feature in the last decade. On the whole, for every Rx. 100 worth of Indian produce and manufactures that was exported in 1880–81, that produce left the country 12 years later to the value of Rx. 137, and in 1892, of Rx. 144.

Prices of imported goods.

As regards commodities of foreign growth or manufacture, the imports of which have increased, using the same method of indication, from Rx. 100 to Rx. 133, in the 12 years, in addition to the facilities of internal distribution the cost has been diminished in the countries of production by the appreciation of gold, the economy of labour, and the reduction in freight charges, to an extent that in many cases of articles in much request has been enough to counteract the relative fall in the price of silver, whether measured in gold or commodities. At all events the supply has been such as to greatly increase the demand, and to bring within the reach of whole classes of the community articles which from being luxuries have now been incorporated as necessities in the new standard of living. The present generation has seen, too, the substitution of foreign umbrellas for those of native manufacture; of kerosine oil for the vegetable product of the village presser; of brass and copper vessels for earthen ware and of iron machinery for wooden in such processes as sugar-pressing. The use of foreign twist and yarn in cotton-weaving will have to be noticed below in connection with the condition of that important industry, and so will the extensive imports of cotton piece goods, but it may be mentioned that work is now found for the sewing machine in nearly every small market town, and that in the plains there is hardly a village that possesses a shop at all where foreign cutlery, hardware, and articles of haberdashery are not to be got. Whether

* But in 1892–93 there was a heavy fall.

Whether these innovations and substitutes imply the appreciation of a higher standard of living or of a pecuniary saving to be derived from them, their advantages must have been remarkably apparent before a community as conservative and suspicious of change as is the Indian peasantry could have been induced to avail itself of them. CONDITION OF THE PEOPLE.

The general rise in the price of agricultural produce above noted has necessarily affected to some extent the market value of the land from which that produce is obtained, but the fluctuations in that value have been chiefly determined by influences of a more lasting character. The first consideration in respect to this is the tenure. Where the land is held by the cultivator directly from the State this is inviolable so long as the assessment is duly paid. Where there is an intermediary in whom the proprietary rights are vested, legislative provision has been made for the protection of the tenant-cultivator against undue pressure or arbitrary eviction from his holding. Then as to the extent of the rights over the land, this class of property is recognised, as a rule, though subject to special exceptions, as heritable and transferable, a quality on which more will have to be said later on. There remains the question of taxation or rental. In some parts of the country the State assessment has been fixed in perpetuity, and as the estates thus treated consisted at the time of settlement of large areas of arable waste with but a small nucleus of inhabitants, the rent-charge then claimed by the State is little more than nominal now that the tract has become fully populated, and varies between a sixth and a third of the rental paid in the present day by the tenants to the grantee or estate-holder. But in the greater part of India the State assessment is periodically revised at intervals of about a generation, and whether the demand be based on some customary or arbitrary standard, or whether it be approximated to a recognised proportion of the produce or rental, the modifications effected on revision must bear reference to general considerations only, such as the variation in price of produce, the "betterment" of the tract by roads or railways, or some other improvement affecting that part of the country at large. Tenant-right is thus scrupulously respected, and each estate holder or occupant enjoys the full benefit of his improvements untouched by any increase of his assessment on account of them. Since advantages of the kind just mentioned that have already accrued are alone taken into consideration, and not prospective benefits or profits, all the fruit of improvements in communications or transport and thus in prices, that come into operation early in the period of the settlement, is enjoyed by the assessee alone without the participation of the State, till the expiry of the current term. The mean incidence of the State demand will be seen from the Provincial Sections of this chapter to be everywhere light, and in tracts where the progress since the last rates were introduced has been such as to warrant a specially large increase, within, of course, the sanctioned limits, provision exists for tempering the enhancement to those who are subjected to it, so as to avoid so sudden an addition to their expenses for the year. It will be found from the returns of land revenue that, speaking generally, out of the steady and almost continuous increase that has taken place in the receipts under this head during the last ten years, less is due to enhanced rates than to the extension of cultivation over the assessed arable waste. The incidence of the demand per acre is either stationary or has advanced or receded but by a minute fraction. The second is the case in the Panjab, the last in the North-West and Central Provinces, Bombay and Madras. The revisable assessment, therefore, though ultimately based on variation in the cash value of agricultural produce, follows the latter only at a great distance, so that wherever the rainfall and other conditions affecting cultivation are favourable, not subject, that is to say, to wide annual fluctuation, the weight of the State demand is insignificant. Where the conditions are more uncertain there are seasons, of course, when the outturn of the harvest is so small that its market value does not enter into the calculation, because there is little produce remaining over for sale. In such circumstances greater consideration is given to the precarious prospects of the cultivator than to a wide range of prices in the determination of which the local produce of the year may have but little share. In some cases the mean rate of the assessment is set very low, so that a good harvest may the more easily pay for a partial failure. In others, as in Madras, a portion of the revenue is remitted for the year in question, under rules and on principles that form part of the regular system of the land-settlement of that Province. In all parts of India under terminable Market value of land.

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terminable settlements, the suspension of the assessment in cases of clearly proved necessity arising from general scarcity of rain or loss of crops by floods, locusts, or other calamities, has of late years been sanctioned as a feature in the administration of the land.

Rental values.

The lightness of the State assessment, however, is shown more clearly by comparing it with the full rental of the land, where the latter is ascertainable, than by quoting the actual incidence. In Upper India rental values are generally recorded in the ordinary course of fixing the assessment, whilst under a settlement direct with the occupant or cultivator subordinate rights are not recognised, except in special cases, in the State register of lands, and information regarding rent is obtainable indirectly only. In the Panjab and North West Provinces the average rent is double the assessment, but the range is from the latter up to ten or twelve times as much. In Bihar the pressure of the agricultural population on the permanently settled land and the same cause in the more recently settled tract of Oudh, has driven rents up to the highest rate that can be reached by competition, though the position of the tenant has been materially strengthened in both parts of the country by the legislation of 1885 and 1886 respectively. With the keen competition that prevails, however, it is almost impracticable to ensure the observance of the legal terms that both parties concerned are bent upon evading, and rents far in excess of the rates that could be recovered through a court of law are very generally, in Oudh at least, offered and accepted. In the Narbada valley of the Central Provinces the competition is equally brisk, owing to the increasing demand for wheat. It is stated, however, by local authorities that this state of affairs is exceptional, and that in the greater part of this Province the burden of rent is very light. In one district of Madras, in which a special scrutiny was made of the leases registered, it was found that the rental varied in rate from four to six and a half times the assessment, the latter being paid by the lessor.

Sale values.

The value of the land at present, relatively to what it was some years ago, can be appreciated, too, from the records of sales and mortgages. Of the former, instances are given later on from the Central Provinces and Madras, and of the latter, from the Panjab, where the average loan per acre of land mortgaged rose from 18 rupees in 1880–81 to 31 rupees in 1890–91. A village in the Central Provinces, which sold for 300 rupees in 1867, realised 700 rupees in 1875, and 3,000 rupees in 1883. In Madras, rice land in the fertile tract of Tanjore was sold at an average rate of 39 rupees per acre in 1862-63, for 146 in 1873-74, and for 180 three years later. In a district to the south of Tanjore, a plot of land that sold for 330 rupees in 1865 fetched 1,100 rupees in 1890, and in another case, in a less favourably situated tract, land sold for 5 rupees per acre in 1855 was resold in 1876 at 43 rupees. Similar testimony can be found in the records of other parts of the country.

Collection of the State demand.

Further evidence of the value of land, as well as of the fairness of the State assessment, is furnished by the returns of the collections. In every province it appears that the portion of the demand not paid within the year in which it falls due is insignificant, except in the cases where a certain amount has been expressly postponed for collection on a later occasion, in the circumstances mentioned above. In 1891-92 the collections scarcely in any instance fell below 99 per cent. of the demand. No general conclusions can be drawn from the returns of the processes issued or executed in connection with the land revenue, because the purpose which such process is intended to serve is by no means the same in every instance. In Upper India, wherever a settlement has recently been concluded, the remarkable growth of notices and other processes that ensues is accounted for by the desire of both landlord and tenant to ascertain exactly their respective positions under the new circumstances, and in comparatively few cases, even under a current settlement of some years' standing, is there any resort to coercion, since the object of both parties is served by the record of the notice. Elsewhere, too, both in Madras and Bombay, where such declarations or objections are not required, the number of processes is always considerable, partly owing to the remnant still existing of the old feeling that prevailed under Maratha rule, that it was detrimental to the prospects of the peasant to pay up otherwise than as little and as late as he dared. The area of land annually sold in default of payment is everywhere very small, and in the Panjab such sales are said to be practically unknown.

Individualisation of landed interests.

A point to be noticed in connection with this part of the subject, and one

one not without its importance in the provinces where the interest in land is much subdivided, is that, owing either to actual subdivision or to the greater value now possessed by landed property, which inclines the possessor towards the assertion of individuality with regard to his holding, there is a tendency to weaken the village system of such tracts, especially where the land is held in some form of joint ownership. The general state of security enables the individual to dispense with the aid formerly rendered him by his coparceners against outsiders, whilst, in consideration of the increased value of the land, his distrust is transferred from the latter to the former. The merits of this tendency is a question of State policy rather than one affecting the material condition of the people, except so far as the subdivision tends to become excessive. In parts of Bihar, for instance, it often ends in converting the proprietor into either a pauper or a field labourer, simply because his estate is inadequate to produce enough for him to live on. From the other point of view the tendency is nothing more than is to be expected when the survivals, useful as they may be, of a former state of society are brought under the influence of such solvents as the provisions of the modern Indian Codes. CONDITION OF THE PEOPLE.

It is worth considering, at this point, how far and in what directions the enhancement of the value of the property of the landed classes, as above described, has been accompanied by a rise in their standard of living. Something has been said about this whilst treating of the growth of the import trade. The various *criteria*, however, of the standard of living in the case of the Indian community of the rural tracts, and it is with these alone that the present statement is concerned, are difficult to appreciate. The life of the classes in question is spent, for the most part, out of doors, and, except in the north, the house is of comparatively little importance, and is generally constructed of the material nearest at hand. Masonry work is in many parts of the country scarcely known, whilst in others wattle and daub, and thatch for the roof are unattainable. It is in towns alone, and in parts of the Panjab and the North West Provinces, that the dwelling receives a share of the owner's prosperity. Furniture, again, may be left out of account. Domestic servants are luxuries that appertain only to the rank at which the landholder begins to put his women into seclusion, but, above this, the tendency to maintain a considerable staff for outdoor use otherwise than on the farm affords, no doubt, an indication of a rise in wealth. The use of horses depends more on locality than resources, and in the greater part of India the place of this quadruped is taken by carts and additional bullocks, both of which, as has been shown above, have increased in number of late years very rapidly. In the case of food it may be said that very little change takes place with improved circumstances, though a little variety is introduced. For instance, in the Deccan, where millets were almost the only grain eaten 10 years ago, it is stated that rice is now almost universally added in middle-class families. The increase of cows and buffaloes, again, implies a more extended use of the products of those useful animals. Clarified butter, sugar and spices, too, are now in greater demand. In several of the reviews on which this chapter is founded, especially those prepared by natives of India, considerable stress is laid on the increased use in the household of articles imported from foreign countries, such as matches, lamps, and, above all things, metal vessels. These, it is said, are now to be found in every hut except those of the very poorest classes, and even there, probably, there will be a platter or two of brass or copper. The imports of these metals, both wrought and unwrought, have risen by some 30 per cent. since 1880, and at every large religious gathering (and these, it must be stated, are the most efficient channels by which a trade is popularised) one of the most frequented and lucrative divisions of the bazar is that of the brass and copper smiths. The demand, indeed, is now so large, that in several parts of the country machinery has been called in to the aid of the village handicraftsman. As for clothing, the importations of cotton piece-goods increase annually, and broadcloth and other woollen fabrics are coming into favour. Flannel and baize are to be seen in village shops, and in Assam the heavy locally-woven silk that used to betoken a man of rank is now worn at festivals by all the middle classes. The editor of a Calcutta journal, Babu Shambu Chandra Mukarji, in a book he wrote a few years ago on his travels in Bengal, expresses an opinion which is worth quoting: "I am infinitely delighted to observe the evidence of comfort and comparative civilisation in the peasantry of these parts (Eastern Bengal). Standard of living.

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It is something that so many about here are well protected in the cold weather by the cheap cottons and woollens of Europe. The women have all more costly ornaments, if less heavy and numerous than their mothers or grandmothers could boast of. We rarely come across the old abomination of the twisted leg-cuff, as it deserves to be called, rather than anklet. Shell bracelets are few and far between, but of a more manageable description than the manacles used of yore. Silver clearly predominates; brass is nowhere. At Dacca we saw that the Hindustani women had replaced by smaller and lighter silver jewelry their heavy pewter bracelets. Here, on the banks of the Megna, we found the women all display silver, some in profusion." The same views are expressed by the Madras reporter. So far as ornaments go, the evidence afforded by the Bombay Mint Returns during the famine of 1876–77 shows what a stock can be sent into the market at a pinch. More recent testimony is that got from burglaries and dacoities, or gang robberies, especially those in the Central Provinces a few years ago, under Tatia the Bhil leader. The houses attacked and plundered were all those of forest tribes, or cultivators of the lower grades, yet an average of 77 rupees each was got from them, not only in ornaments but in coin also. The practice of burying coin is proved by the same means to be widely prevalent amongst all classes of cultivators above the landless grades, since the ornaments, though to a great extent made up of coin and pledged to the village money-lender, are regarded as family property rather than as investments, and it is only in the stress of severe scarcity or famine that they are altogether abandoned. Amongst other indications of increased spending power, the remarkable growth of passenger traffic on the railways, chiefly third class, has been mentioned above, and to it may be added the similarly developed movement by steamer along the coasts and on the great rivers of Bengal, Assam, and Burma. Then, again, it is inadvisable to omit from the factors that enter into the standard of living, the accessibility of medical aid, of which the population has taken considerable advantage. There are few tracts in India where the efficacy of sulphate of quinine is not recognised, and the distribution of small packets of that useful drug from district offices in Bengal is one of the latest innovations of the enterprising Postal Department. The confidence of the public in European methods of treatment, too, is evidently growing apace, for between 1880 and 1891 the number of dispensaries and hospitals increased from 1,221 to 1,809, or by 48 per cent., and the attendance at them by 90 per cent., or from 7,408,000 to 14,068,000. The latter figure is not far from 6 per cent. of the population amongst which the institutions are placed, and represents a daily average of nearly 106,600 patients.

Average income.

The attempt has been made, in some instances, to estimate the average annual receipts and expenditure of different classes of the peasantry, but the task is obviously one of extreme difficulty. It would be so, in all probability, in any country, and has but small chance of success amongst a population so split up into sections, social, religious, and racial, as are the inhabitants of India, who have the additional traits of reticence, inaccuracy, and suspicion. In some cases where inquiry has been made, the answers of the head of the family proved to demonstration that the whole household was devoid of the means of subsistence, whilst two full meals a day were being cooked before his eyes. In other inquiries the fault of proving too much was almost as apparent, and the peasant, in his desire, after his kind, to establish his poverty, disposed of his very existence. The general results, whether obtained by European or by native investigators, are at the best but rough approximations, in which the personal element is too pronounced to make it safe to accept them. To get a trustworthy notion at all of the domestic economy of the peasantry and rural classes generally, it is essential to live amongst them and to enter into their domesticity. This is practically out of the question in the present day, and even an Abbé Dubois, should one arise, would find the conditions adverse to his repeating his former experiment. To natives of the country of a calibre to make use of the information they pick up, this course is equally inaccessible. Between the peasant and the European is fixed the gulf of race and apathy, but the literate native is separated by the still more serious obstacles of caste and antipathy. It is open to question, too, whether, considering the conclusions to be drawn from what has been already set forth in this review, this information is necessary before the general condition of the agricultural population can be appreciated.

Summary.

It has been shown that, taking the provinces as a whole, the population and their

their cattle are increasing; that the area under cultivation is expanding; that more is being got out of the soil without any apparent deterioration of its fertility; that those who have land can pay their rent with one-half the amount of produce that was necessary a generation ago; that new and remunerative cultivation has been opened to them by foreign demand; and that, if they chance to dispose of their land or a portion thereof by lease, mortgage, or sale, they get a price for it very far in advance of any ruling till within the last 10 or 20 years. It is shown, again, by the Trade Returns that, in spite of the increasing number of mouths for whom food has to be provided in India, a good deal of their produce can be spared from the country for use elsewhere. In return, their spending power has grown more rapidly than their numbers, and the luxuries of the last generation have become the necessaries of this. The ordinary condition of the peasantry, then, from a material standpoint, is one of sufficiency, according to a standard that is gradually and continuously rising. But this condition is that of the British provinces as a whole. It has been already pointed out that in three or four tracts, notably in that between Patna and Lucknow, in the south and west of the Jamna valley, in the Deccan, and along part of the West Coast, the pressure of population on the arable land on the one hand, and the frequent recurrence of unfavourable seasons in the others, keeps a considerable proportion of the agricultural classes within measurable distance of the border-line of that condition. Of these tracts, Bihar and the coast are probably in the worst plight, and in neither does the influence of even the most plentiful harvest extend throughout the population. In the former the obligations of caste are held in high reverence, and in both the landlord interest is in the ascendant, so that the labourer who gets paid in kind is probably better off than the petty tenant, or, in Bihar, than even the small proprietor, whose share of the family estate has been reduced to a minimum by constant repartition. In the other tracts mentioned, the circumstances of the people are such as to enable them to withstand the effects of a single bad season following one of even average productiveness, without material diminution of their ordinary standard, but to maintain their ground against a succession of inferior harvests, as has been their unfortunate experience from time to time, implies a considerably higher degree of thrift and providence than they have yet acquired. To put the case in another way, in the over-populated tracts there is a stratum of the community which habitually falls below its ordinary standard of living during a few months of every year, and the class immediately above it is necessarily abnormally sensitive to the variations of the harvest. In the other parts of the country that have been distinguished above from the rest, the latter class lies at the base, and are recruited from those above only when, in the alternations of the seasons, the inferior have predominated several years in succession. The above remarks apply to the cultivating communities of the plains. The hill tribes, except where they form a strong, homogeneous, and widely-diffused community, are everywhere accustomed to resort to the produce of the forest between their primitive harvests.

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In considering the increased power of spending possessed in the present day by the masses in India, two costly luxuries have been omitted from mention, not by reason of their unimportance, for they respectively fill a large place in the lives of the classes who indulge in them, but because there is no means of gauging them, except by their results. The first is litigation, the other, domestic ceremonies. As regards the former, whilst it has been everywhere facilitated by the multiplication of courts, and the increasing number of trained legal practitioners that emerges annually from the universities, it does not seem to have extensively spread amongst the masses, save in the parts of the country where the land is held on joint or subordinate tenures, or otherwise than by the occupant direct from the State. Here, under the individualising tendencies already noticed, suits for rent, to establish title and the like, grow with the resources needed to maintain them. But, as a general rule, litigation is the recreation of the large proprietor and the luxury of the rest. It is an element in the situation not to be overlooked, though a more prominent one in the north than in the south of the country. The expenditure on ceremonies, such as marriages, funerals, head-shaving, amongst the Hindus, circumcisions amongst the Musalmans, and so on, is the national luxury, so far as the term national can be correctly applied to the heterogeneous population of India. At all events, it is

Expensive and occasional luxuries.

Litigation.

Domestic ceremonies.

CONDITION OF THE PEOPLE.

a luxury, possibly the only one, the taste for which is found alike in the dregs and at the top of the civilised community, and is dormant at the present time only amongst the lower forest tribes, who have not yet acquired the means, the credit, or the vanity on which it is based. In certain castes the minimum expenditure on the more important of the above ceremonies is fixed by rule, but elsewhere the question is simply one of social emulation. In connection with the present subject marriage is the ceremony most to the point, for whilst the existing position of a family has to be maintained by not less than the conventional expenditure on the marriage of a son, the family can only rise in rank by the marriage of its daughters into a family above it. It is true that this rule is theoretically binding on the orthodox Hindu only, but in India that orthodoxy acts as a social standard even to those far without its pale in matters of theology. Efforts have been made of late years in a few isolated instances to effect some reform in public opinion on this matter, but it is still found that a good harvest is at once followed by an outbreak of marriages, not as in Europe, out of consideration for the fair start in life that can thus be given to the young couple, but, on the contrary, by reason of the excellent opportunity of shining amongst the neighbours and caste-fellows by a profuse expenditure on banquets, priests, and mendicants, the bill for which will very probably fall to the lot of the youthful bridegroom to liquidate after the family estate and its obligations have devolved on to his shoulders at his father's demise. This habit is the main cause of the very prevalent indebtedness of the Indian land holding classes, but it is not implied that it is the only cause, or that indebtedness is universal.

Causes and prevalence of agricultural indebtedness.

In what have been termed the zones of uncertain rainfall, for instance, the main cause of debt is the frequent necessity of borrowing after a bad season with the intention or hope of repaying the loan out of the next harvest, a hope that is often frustrated by the recurrence of the conditions of the previous year. This practice is not unknown in tracts far superior to the above in fertility and agricultural conditions, where the resources of one good year would, if properly administered, amply cover the requirements of the inhabitants for the ensuing two or even three years, provided the latter were not seasons of entire failure. Sylhet, in Assam, is an instance of this. That the taxation of the land is the cause of agricultural indebtedness is improbable, judging by two facts that are prominent in the provincial reviews. First, that the classes deepest in debt are those who pay relatively the lightest rates, such as the estate-holders of Oudh, Bihar, Sindh, the Central Provinces, and other parts of the country where this class predominates and where the State demand is but nominal compared to the rental. Then, again, the evidence, such as it is, of the outturn of produce per acre, taken with the present prices fetched by that produce in the market, indicates an incidence of that demand on the gross produce of between 3½ and 9 per cent., which is insignificant in comparison, not with the rental alone, as mentioned above, but with the amount ascertained to be spent on ceremonies. In the case of light soils, especially in the uncertain tracts, the system of suspending the collection of the assessment, light as the latter may be, acts as a remedy in the only circumstances where the State demand might be said with any foundation for the assertion to gall the poorer class of occupant, whose holding consists almost entirely of this sort of soil.

As regards the prevalence of indebtedness, it may be inferred from what has been said above as to its causes, that there are few parts of India in which it is not found to a greater or less extent amongst the agricultural population. Fertility and natural resources seem to be no bar to its existence, and though it is found that in Assam proper, that is, the Brahmaputra valley, there is no indebtedness worth mentioning, the peculiarity seems due to the isolation of that tract and the slight hold possessed by caste on the masses, in both of which respects time will probably work changes. But in Sylhet there is a good deal of debt, and so it is throughout the rich tracts of Eastern Bengal. In Burma, where the surplus food nearly equals in bulk that consumed by the inhabitants, some indebtedness is reported from most of the wealthier districts, and is attributed to gambling and the general haphazard views of life taken by the Burman peasant. In Madras alone of the larger provinces is the subject not given prominence in the review, but from what is to be gleaned in various ways from that work, it seems that the writer, a Brahman in high office, and those whom he consulted, assume the indebtedness of the middle-class landholder to

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be a matter of course, and due to the cause mentioned above, that is the obligations imposed by caste and convention on the head of a respectable family to spend on marriage ceremonies much more than he has got. This view corresponds with that taken in connection with the North-West Provinces, and which can also be read between the lines of what has been written on the subject by experienced observers in other parts of India, namely, that to owe a certain amount of money is the normal condition of the peasant throughout the country, and to owe none implies either lending or want of credit. A clear distinction must be drawn between indebtedness, as here used, and insolvency, or even poverty, since the three are not by any means synonymous terms in India, any more than in England. The condition is no new one in the former country, though its aspect may be changed. The reasons for borrowing were in existence as much before as since the introduction of British administration, and the records of the early days of the latter show how the money-lender, or Sahukar, was a prominent character in all the large villages, and how the peasant, in his futile endeavours to escape from his clutches, suffered what the officer charged with the investigation of the condition of the Deccan on taking possession in 1818, calls "the hellish torments of Sisyphus." The great change effected under British rule is the expansion of credit, in respect to both the value of the security and the number of persons who possess it. In the previous days a good sound title to land was vested in a comparatively small body. The produce could only be disposed of locally, and the enjoyment of the proceeds was altogether too precarious to tempt the trading classes to risk much money on it. Alienation by the occupant was difficult and hampered by extensive rights of pre-emption and resumption. Under British administration, the rights over land became, as a rule, alienable and transferable property, the value of the produce increased, and with it, that of the land in lease, mortgage or sale. The registration of deeds and the advantage given to the creditor in the recovery of his claim by the Civil Courts, complete the foundation on which the existing system of credit is built. Setting aside the tracts where indebtedness is attributable in great measure to agricultural exigencies, as above pointed out, it may be assumed that the incentives to borrowing, being inherent in the social system, have not decreased under the stimulus of the new system. On the contrary, a notable growth of indebtedness has been found in all cases to follow, and at no wide interval, the establishment of an alienable or transferable property in the land. The latest instances of this tendency are found in the Central Provinces and the Jhansi territory under the Government of the North-West Provinces, regarding which some account is given in the provincial paragraphs that follow this summary. This fact, considering the extent to which recent legislation has tended to strengthen the position of the tenant against eviction or undue enhancement of rent, has resulted in the extension of the credit of classes amongst whom, from their precarious tenure, it was formerly unknown or very restricted; and it is too often the case that in such circumstances, advantage is taken of the concession to run into debt, not, of course, to the pitch of insolvency, but enough to allow the money-lender to keep a constant claim alive, so as to maintain his hold on the estate. The higher the title to the land, the greater the credit and the concomitant indebtedness. In Upper and Central India the burden of debt is heaviest amongst the proprietors of large estates, who indulge not only in extravagant expenditure on domestic ceremony and on large establishments of retainers, but also in litigation against each other. In the middle ranks of society, the occupancy-tenant owes more than the tenant-at-will, whilst the labourer "laughs at the idea of his being in debt at all." There is therefore some truth in the sweeping aphorism that is sometimes quoted with reference to this feature in Indian society, that a family is there held in estimation according to the amount of its debts. What has been said above must not be forgotten, that indebtedness does not necessarily imply poverty, certainly not distress, and the position of the average debtor is comparable to that of a man who keeps a running account at a bankers and occasionally overdraws it. Amongst the smaller occupants and tenants, however, especially where the land is valued by the creditor simply on account of its produce, not by reason of any honorific quality inherent in its possession, there are, no doubt, many instances of the pauperisation of the nominal holder by his retention merely to work the land for the profit of his money-lender.

CONDITION OF THE PEOPLE.

Pauperisation and dispossession of the cultivating classes.

Here we are face to face with one of the tendencies of the present system, which must lead to serious results if it were to become widely prevalent. Hitherto, as it appears, the increased value given to the produce of the land by the peaceful development of the resources of the country that has been in progress for the last generation or two, has largely redounded to the advantage of the producer, but it has also awakened the cupidity of the trader, who, by means of advances in cash or kind at high rates of interest, is naturally anxious to extend his influence over the landed classes, so that what now goes into their pocket may be diverted into his: that is, to sweat down their return to the "living wage," and to take advantage of the railways to dispose of the rest as may be most lucrative to himself. Another feature of the present transactions of the class in question is the increase of credit which is attributable to the difference between the law as it now stands in the majority of cases and what it was before the application of the British codes, in respect to the liability of the land as the ultimate security for all the obligations of its possessor, whether it may have been specifically pledged for them or not. By its becoming the latter, the *status* of the landholding classes has been seriously modified. Formerly, the comparatively few that enjoyed credit could be ground down to the *de facto* position of tenant, or even labourer, on their holdings, but they still remained the titular proprietor of the soil with all the dignity that appertains in India to that condition. Now, their whole right, except in a few cases of special tenure, is at the mercy of a decree or duly executed deed which the experience and legal knowledge of the trader has obtained, with the aid of the irresistible jingling of a money-bag, from the ignorance and improvidence of the rustic borrower. "In a Native State," said a Panjab landholder to an inquiring official, "Law is the salt, but in British Districts it is the whole banquet," and in some parts of the latter territory, the problem has already arisen how to reconcile the equality of the parties to such transactions in the eyes of the law with the inequality in fact of which the transaction is but too often the proof. The trader fully appreciates the value of the land as an investment, either by reason of the profit to be made out of it in the present state of affairs, or because he is ambitious of entering the class of proprietors in parts of the country where that position has its social advantages irrespective of caste. In the Panjab, the Central Provinces, the Deccan, and the Jhansi district of the North-West Provinces, the dispossession of the cultivating population in favour of a class which could neither cultivate or administer their estates, has at times reached a pitch that caused serious anxiety to the Government. It is not as though a set of pauper and incompetent cultivators were being uprooted to give place to a class of enterprising and educated resident proprietors, who know how to permanently improve an estate; and even if it were, the experience afforded by the course of large properties that is already available in India gives little prospect of successful administration by this means; for wherever they exist, with a few exceptions that make the general rule the more striking, the owners are either absentees, who spend their time and their revenues off the estate, or if they reside on their property, their personal extravagance has generally ended in the need of special legislation to free their estates from its results. Examples of the former are more frequent in Bengal and Madras, and of the latter in Oudh, Sindh, and Gujarath. It has to be remembered, moreover, in connection with these transfers of land, that the new men are not, as in the three last-named tracts, members of the hereditary landholding castes or races, but non-agricultural, like most of the Bengal proprietors, and often aliens to the country of their adoption in language and religion. They cannot hold their own against a recalcitrant tenantry for long, as the only method of ruling with which they are acquainted is by civil process, the ultimate results of which are to be found in the Deccan riots of 1874, in the slit noses, common of yore, in parts of the Karnatak, and, more recently, in the murders in the Western Panjab. Most of the above, however, are exceptional cases, and chiefly found where the value of the land has been greatly raised of late in consequence of the suitability of the locality for the growth of crops for export. In Jhansi and the Deccan, too, there were special causes at work, but, on the whole, there has been no general and widespread movement on the land by the non-agricultural classes. At the same time, it is a curious feature in the census returns that the proportion of money-lenders who combine that occupation with the possession of land is far greater in British territory

territory than in the Native States where they have no help from the Civil Court in acquiring it. CONDITION OF THE PEOPLE.

It is not proposed to enter here into the details of remedies that have been adopted or are under the consideration of the Government of India. The most extensive measure yet in operation is the Deccan Agricultural Relief Act of 1879, of which an outline is given in the provincial paragraph below, and the main provisions of which, it has been suggested, might, with some modifications, advantageously be applied to the circumstances of the Panjab and Central Provinces. But the matter has yet to be decided. The special Acts mentioned above, for the relief of certain classes, seem to have so far succeeded in their object that they may be said to keep the head of the landlord above water, even though he may not give them the chance of helping him to dry land, and insolvent recidivism, if the phrase be allowed, is by no means unknown. There is also worthy of mention the plan of making the land inalienable and not transferable by mortgage or sale, as it is in Native States. This is said to have worked well in the small Province of Coorg, where it has been applied to a certain class of tenure, and in the case of occupancy-tenants in the North-west Provinces, where the rule, being applied on so much larger a scale is insusceptible of accurate test. It is now under trial on the lands recently assigned to cultivators along the new Chinab canal in the Panjab, where the experiment will be watched with much interest. The conversion of the rights in land into a transferable property has been, beyond a doubt, a leading factor in the expansion of the peasant's credit, but that there has been no general dispossession by the creditor indicates that the latter regards that process only as the *ultima ratio*, except in the instances above quoted. The working credit lies in the produce, so it is open to question whether the withdrawal of the privilege of alienation will practically restrict the peasant's power of borrowing to no more than is compatible with his legitimate needs. It has been seen that the greater portion of the amount borrowed is spent unproductively, so that the extension of credit here bears a signification widely different from that which would be attributed to it in England, for instance, where more than half the land is said to be mortgaged, and, as a rule, productively to the proprietor. Remedial measures.

The great predominance of the agricultural classes in India renders a review of their position a lengthy process. It will be unnecessary to enter into such detail as regards the rest of the population. First, as to the field labourers, who are much mixed up in the census returns with the general labourers. In most rural tracts they receive their wages in grain and other food, with presents of clothes if in yearly or more permanent employ. They are thus not put to any disadvantage owing to the rise in the price of food, and in some parts of India the review of their condition mentions that the demand for labour has even resulted in a rise to some extent in their remuneration. This is confirmed by what is stated in connection with the congested tracts, that a field labourer is, on the whole, better off than the tenant or small proprietor. Where cash wages are paid to labourers of this class, and this is only near towns or in other exceptional localities, the rate has risen, but not in exact harmony with grain prices. The same may be said as regards wages in general, though the information on this subject is by no means complete. In towns where business is brisk, such as not only the seaports but places like Cawnpore, Dehli, and others, wages have risen considerably. In some of the rural tracts where extensive public works have been carried on of late, it was found impossible to attract local labour at the sanctioned rates, and men had to be called in from a more congested part of the country. But the reviews, as a whole, lay stress upon the great help afforded by such works as canals, roads, and the earth works on railways, at times when field labour is not in demand. The large industrial establishments in the chief towns, such as those connected with jute in Calcutta, with cotton mills in Bombay, and with rice in Rangoon, find work for a considerable part of the year for several thousands, and some of the above industries are also spreading to the interior. The permanent staff of the Railway system consists of over 200,000 persons, and mining, again, is on the increase, though yet in its infancy. The village-menial class, a very numerous and useful one, has taken advantage of the above means of making a living to an extent that leads some of the older and more conservative members of the community entitled to its services to deplore the want of cheap labour which this emancipation has caused, along with the rise in the standard of living of the low castes in question and other signs of independence, considered equally anomalous. The labouring classes.

CONDITION OF THE PEOPLE.

Artisans.

The greater part of the artisan community is attached to the village, and stands or falls with its patrons. It consists chiefly of independent workers, who employ comparatively few, and no permanent, hands to aid them, and most of them hold a plot of land allotted to them from the village demesne. At present, therefore, the carpenters, blacksmiths, and jewellers, who are partly paid in grain, may be said to be flourishing, especially as the two first have taken to work in factories and shops, on railways and other public works, and in private establishments, where they acquire skill in the use of European tools and learn methods of work different from those of their forefathers. The potter has probably suffered somewhat from the substitution of metal vessels for those made by him, but he is benefited, on the other hand, by the demand for his bricks and tiles, which in some parts of the country are superseding wattle and thatch. The oil-presser, too, is the victim of kerosine, but like others of the lower artisans, he is usually a landholder, and lives by cultivation, or as collector and provider for export of the materials of his trade. An important functionary in Indian economy is the weaver, who from a very low origin amongst the village menials attained considerable rank before his industry was encroached upon by foreign competition. The testimony of most of the local officers who have inquired into the condition of this class is to the effect that the demand for hand-loom fabrics is as a rule lowered everywhere owing to the growing taste for foreign piece-goods, so that in the towns, at all events, the weavers are suffering from the depression of their industry. But this is evidently not the case in all parts of the country, nor is it a new feature in their fortunes. Just 100 years ago, a Madras Councillor recorded how he found the weavers to be invariably the first of the community to feel the pinch of hunger when a famine was imminent, as so large a proportion of them lived from hand to mouth. Then, again, it cannot be to no purpose that so much machine-made twist and yarn is absorbed each year in the various provinces. The return of rail and river-borne traffic for 1891–92, for instance, show that this commodity entered the provinces, excluding the seaport towns, to the value of Rx. 4,068,830 in excess of that which left them, so it is clear that as Mr. J. L. Kipling found was the case in the Panjab and Deccan, so in other parts of the country, the local weaver has discovered the advantage of working machine-made yarn into the stout hand-woven fabrics which still commend themselves so strongly to his rustic customers. He has a crisis to pass through exactly of the same nature as his compeers had in England between the middle of last century and the early years of this, but the numbers of his community do not seem to be diminishing, and the Luddite element in his nature, even if it exist, has not come to the surface.

The professional classes.

There remain the professional classes to be considered. These constitute but a small proportion of the population, less indeed than two per cent., including both the liberal and the artistic branches. The former suffer much in the same way as the small landed proprietors of high caste, from the competition of numbers. Tradition and conventionality are adverse to their exercising their superior talent and education in any but literary pursuits, and the market value of the latter, like that of the land, has risen under British rule till its attractions led to exaggerated competition. Of the classes that do not subsist on fixed cash salaries, the lawyers are in by far the best plight, and, next to the merchants and traders, the most generally prosperous of the whole community. But there are signs of surfeit even in this favoured pursuit, and the younger members of the bar have to leave the large towns and start litigation on a lower level than their predecessors. Medicine attracts but a small section of the hereditarily professional classes, and is recruited to some extent from below. It has gained a fair footing, especially in the towns, and its practitioners, adjusting their scale of remuneration to the circumstances, seem likely to form a useful and efficient body, whose services will grow from year to year in popularity. There is at present little scope for architecture, and engineering is chiefly confined to the railways, canals, and public works carried out by the State or large companies, where the employés are put on fixed cash stipends. Of the rest of the non-salaried, the priests and mendicants form the largest sections, and both are paid largely in grain, so that the only change likely to occur in their circumstances is from the disposition of their patrons, where grain fetches so high a price in the market, to somewhat curtail their largess. As to the salaried class and others on fixed cash incomes, the rise in the price of food-grain has no doubt been to the detriment of the native staff, just as that of the silver price of gold has been

been injurious to the European on the similar class of income, and the lower grades amongst them have been put in consequence to some hardship. They have taken full advantage, however, of the present system of administration, with its large number of posts, safe tenure, and well-regulated scheme of promotion and pension, and of the extensive system of gratuitous or cheap education which leads up to such employment. The result is that the market for such qualifications is glutted, and the remuneration kept down, in the public interests, to fair rates, which are still above, and taking into consideration the certainty and duration of the career, greatly above, those customary under the fitful patronage of a native court. It is to be remembered, too, that of the six per cent. of the population that provide the recruits for these professions, only 27 per cent. of the males can read and write, so the community interested is even smaller than the above figures would apparently imply. CONDITION OF THE PEOPLE.

There is little more on the subject of the condition of the people that would not appear more suitably in the provincial paragraphs below than in this general abstract. In the latter it has been sought to give merely the general outlines of a series of most complicated questions, some of the more serious of which are left to be further noticed in connection with the part of the country where they are most prominent.

## THE PANJAB.

This review will begin, then, with the important province of the Panjab. It should first be noted that here the range of temperature is greater than in any other part of India, necessitating more solid housing, warmer clothing, and a better class of food, on the part of the population to withstand it. A considerable portion of the province depends upon irrigation for its crops, as will appear below. There are five or six large towns, but the urban population, as a whole, is only in the proportion of 11½ per cent. to the total, and has increased since 1881 at a far slower rate than the rural. As elsewhere, the greater part of the latter is either chiefly or exclusively agricultural in its pursuits, so it is to the cultivation returns that one first has recourse for information as to the general condition of the people. In 1880–81, the area cultivated was approximately 20,000,000 acres; between 1886 and 1890, it averaged 22,100 000, and in 1891–2 reached 24,480,078. In the first year of the decade, 90 per cent. of the area quoted was under food-crops; in the last, 88; but, looking at the different mode of computation that has been adopted since 1885, when these returns were set on a more accurate footing, it is probable that the decrease is considerably less than 2 per cent. If the comparison be made simply between the growth of the rural population and the expansion of cultivated area, it will appear that the latter bears a ratio of increase approaching 11 per cent., whereas the former is 12 per cent. above the figure of 1881. But consideration must be given to the extension of irrigation, and the increasing practice of double cropping. There are now 7,461,530 acres of land under irrigation of some sort or other. The wells used for this purpose number no less than 222,217; the State canals, which, in 1881, irrigated 1,645,300 acres, now extend that benefit to 3,067,300, an increase of 86 per cent. The system is by no means as yet complete; but even now, 30 per cent. of the cultivated area is within reach of the means of irrigation. The most recent returns published, moreover, give the unoccupied arable area as 24,472,000 acres, much of which lies within reach of irrigation, as the larger works are extended. Experiments have been made as to the results in this province of irrigation on the out-turn of the crop, and it is found that wheat returned in unirrigated land 9 bushels, and in irrigated 13. It is thus estimated that "the extension of irrigation to 100 acres of land increases the production of the province by an amount equal to that resulting from an extension of cultivation to 48½ acres," or nearly 50 per cent. It is to be remembered also that, concomitant with irrigation, the use of manure has spread, and fertilising material is now eagerly sought after which was formerly left to waste. Then, too, the greater value of the crops that are grown on irrigated land has to be taken into consideration. Indigo, chillies, sugar-cane, and most of the rice in the Panjab are almost entirely restricted to the area where this facility is available. But the crop most important to the agricultural PANJAB.

| Works. | Acres. |
|---|---|
| Canals | 3,461,810 |
| Tanks | 15,794 |
| Wells | 3,822,323 |
| Others | 161,603 |
| TOTAL | 7,461,530 |

PANJAB.

welfare of the province at present, is wheat, of which over 40 per cent. is now grown under irrigation. Not only is this grain the staple food of a considerable portion of the local population, but its production has been much stimulated by the easy sale it finds in the foreign market. It is no wonder, then, that more land is under wheat in the Panjab than in other parts of India, where this grain enters but slightly into the food-supply of the producers. The marginal table shows the total exports of food-grain for the last seven years, with those of wheat distinguished from the rest, and from this the importance of the latter may be appreciated. Two questions obviously suggest themselves in connection with this table. First, is wheat-production being stimulated to the detriment of other food-crops; and secondly, is the export of this large volume of food-stuffs compatible with the retention of an adequate supply for the inhabitants of the Province? As regards the first, it has been observed that the Panjab farmer is shrewdly alive to his own interests, and having ascertained the advantage of irrigation in the case of wheat, will only extend the cultivation of that grain as water is placed within his reach, unless the autumn crop of other cereals in *dry* land has failed. Even then he is averse from disturbing the rotation to which he has accustomed his estate. His tendency, accordingly, is to raise the proportion of wheat-sowings under irrigation, but to continue to use his unirrigated area of other food-crops. On the second question, the evidence of the area under cultivation is highly relevant, and it will have been seen that, with a population of about 20,861,000, about an acre per head was under food-crops in 1891–92, and nearly a third of this, being irrigated, was practically secured from serious failure. The out-turn of food-grain on the above area is taken, in round numbers, to be over 5,000,000 tons, to which must be added vegetables, fruit, and pastoral products, which, with meat, are essentially of importance in the diet of this province. For reasons which have been given above in summarising the results of these local inquiries, detailed estimates of rates of consumption cannot be regarded as worthy of much consideration, but the following statement for 1881 and 1891, based on the method adopted by the Famine Commission has a certain comparative value:—

| Year. | Tons of Food-Grain Exported. | |
|---|---|---|
| | Total. | Wheat alone. |
| 1885–86 | 737,337 | 586,345 |
| 1886–87 | 271,335 | 145,164 |
| 1887–88 | 205,814 | 143,698 |
| 1888–89 | 333,282 | 213,977 |
| 1889–90 | 473,499 | 364,342 |
| 1890–91 | 561,939 | 372,116 |
| 1891–92 | 685,156 | 592,937 |

| Head. | 1881. | 1891. |
|---|---|---|
| 1. Population | 17,604,500 | 20,860,913 |
| 2. Cultivated, or cropped, area, in acres | 21,100,000 | 23,536,123 |
| 3. Area under food crops | 18,520,000 | 20,753,194 |
| 4. Average out-turn per acre, in bushels | 11 | 11 |
| 5. Total out-turn of food, in tons | 5,331,000 | 5,966,543 |
| 6. Food consumed by the people | 3,586,000 | 4,470,196 |
| 7. Seed grain | 390,000 | 437,299 |
| 8. Wastage | 266,000 | 298,327 |
| 9. Consumption by Commissariat animals | 35,000 | 35,700 |
| 10. „ „ local cattle | 214,000 | 243,073 |
| 11. Average exports | 161,000 | 369,178 |
| TOTAL accounted for above | 4,652,000 | 5,853,773 |
| SURPLUS | 679,000 | 112,770 |

Detailed inquiries on the subject have been made in all parts of the province, and the general conclusions drawn therefrom are to the effect that the peasant everywhere enjoys sufficient food, and, except in years of crop-failure, was not in want. The large class of semi-agriculturists known as the village-menials, too, is provided for by the community for which they work. The occasional agriculturist, the field labourer, and the poorer classes generally are those that suffer in a bad season; but, though their diet may be then temporarily reduced in quantity and quality, there is no insufficiency, unless the failure of the crops amounts to famine.

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The means of communication have been greatly extended in the last 10 years. There are now 2,330 lines of railway, against 1,056 in 1881, including the completion of the direct route to Karachi, the connection of Delhi and Firozpur with the Rajputana-Bombay system, and the extensions to Peshawar and Kalka, with the 400 miles of line along the Indus. Metalled roads have increased from a mileage of 1,467 to 2,005, and there are 22,262 miles of unmetalled road. The effect of improved communication on the agricultural prospects of the province are twofold. First, of course, prices have been steadied throughout the Panjab, as far as the influence of railway traffic is felt. Then, again, the creation of permanent grain marts has freed the peasant from the intervention of the village grain dealer, and enabled him to treat direct with the agent of the wholesale merchant. Similarly, the direct line to Karachi has created an export trade in wheat, which in 1891–92 put about Rx. 4,150,000 into the province, whilst the value of the total exports of agricultural produce in 1890-91 came to more than double the entire land assessment for that year. There was a rough estimate made in connection with the Famine Commission, 14 years ago, of the annual surplus profits of the Panjab peasant. Though this may be of no value by itself, it is useful in comparison with the results obtained by the same method in the present day. In 1878, then, the above surplus was set down as about Rx. 14,500,000, and in 1891 at Rx. 24,344,300, or about Rx. 12·2 per family, representing a rise of nearly 68 per cent. As there are few large landed proprietors in the province, and the average holding is nine acres, it is clear that these profits are widely distributed, and not, as in some other parts of the country, concentrated in a few hands.

Land assessment.

In connection with the agriculture of the province, a few figures relating to the assessment may be reproduced for convenience of reference. In the 10 years, owing to re-settlements, it rose by 8·5 per cent., namely, from Rx. 2,310,915 to Rx. 2,506,995, with an incidence on the cropped area of Rupees 1·047, and Rupees 1·0625, respectively per acre. The local rates for education, sanitation, and communications, together with the village officers' cess, as remuneration for collection of revenue, maintenance, and supervision of survey records, &c., and keeping the village revenue accounts, increased in higher ratio than the assessment on the land itself, and from a proportion to the latter of 8½ per cent. in 1881 rose to one of nearly 11 in 1891. Sales of land in default of payment of assessment are said to be practically unknown in this province.

Tenancy.

As regards tenure, it appears that in 1890–91 about 54 per cent. of the cultivated land was held by owners, and 46 per cent. by tenants. Of the latter class 77 per cent. were tenants-at-will, which is a rise of 13 over the ratio of 10 years ago. It must be remembered, however, that the position of tenant is far stronger under the Act of 1887 than it was before the law was amended. The relations of the two classes are harmonious, and rent-suits and applications are only numerous just after a re-settlement, when new questions of *status* and amount of rent crop up. For instance, in 1890–91 there were only 391 suits and 22 decrees of ejectment in the case of tenants with occupancy rights, and 4,606 ejectments of tenants-at-will. The average cash rent paid was 2 rupees an acre, but the extremes vary between a few annas on the southern plains of the Derajat, and upwards of 50 rupees in Hoshiarpur in the centre of the province. Rents in kind are said to vary from one-seventh to one-half the produce.

Agricultural indebtedness.

Finally, it is necessary to take into consideration the indebtedness of the agricultural population, not only with regard to the extent to which it prevails, but with regard, also, to its tendencies. In this Province, and, as will be seen from the subsequent portion of this review, in the greater part of India, the landholder is largely given to pledging his credit to the utmost, and in perhaps the majority of cases the obligations under which he so places himself weigh but lightly upon him. His account with the money-lender runs on from year to year, and he pays back a portion of the loan according to the crop he gets. But his land is, in most cases, an alienable and transferable property, the value of which has risen enormously during the last twenty or five-and-twenty years. In the Panjab, for instance, the State assessment is but from

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one-half to one-seventy-fifth of the rental paid by the tenant to the proprietor. The money lender, therefore, who values position more than the actual cash return on his loans, has been of late taking advantage of the situation to get possession of the estates of his clients, and so to enter the ranks of the landed gentry of the Province. With a population like that of the Panjab, where the attachment to the land is strong, and where, moreover, the money lender is usually an alien, this inclination is a serious matter, especially taken with the support it receives from the impartial administration of the law in the civil courts of British India. Transfers of land were "found to be proceeding in all districts in an increasing ratio, and in many with dangerous rapidity," so that the local Government felt itself compelled to take into consideration the measures by which a stop could be placed on these alienations. As an experimental measure, the land given out under the new Chinab Canal scheme, has been made inalienable, and the results will be watched with much interest. Elsewhere special legislation, such as has been applied to the Deccan, has been proposed. It has been pointed out that until the present generation, when the Civil Code was introduced, the practice in the Panjab was based on the policy inculcated when the first administrative body was constituted, namely, that of maintaining in their integrity the village coparcenaries, or communities. This being the case, the enactment of special provisions, such as those just quoted, is beset with less difficulties than in most other parts of India. The question, however, is still unsettled.

The figures on which the above opinion is based are of comparatively recent compilation, as before 1884-85 there was but a partial record of transactions of this class. The marginal statement, however, gives a few interesting figures touching on this subject. It appears, too, that the rise in the average value is a feature of the sales, as well as of the mortgages. But the main value of the return from which the figures above quoted were extracted lies in its record of the classes between whom the transactions took place. It appears that out of 6,833,114 acres that were either sold or mortgaged during the ten years under review, there were 4,672,221 acres that changed hands between landholders, usually of the same tribe and village, and often related to the vendor or mortgagor. If the mortgages be taken alone, it appears that 64 per cent. came under the above category, and it may be remarked in passing, that the total debt thus secured amounted to three years' land assessment of the whole Province. Such transactions, again, often represent no more than a lease, which for convenience, and to avoid a formal deed, is placed in mortgage form. But, on the other side of the account, there are over 2,100,000 acres sold or mortgaged to non-agriculturists, and though it is unsafe to assume that all of the transferees are money lenders, there is no doubt that comparatively few other classes are in the habit of getting a hold of this sort on the land. Thus, from 5 to 8 per cent. of the cultivated area of the Province seems to have passed away from the agricultural proprietary body, a fact which, in the circumstances above mentioned, gives reasonable cause for apprehension.

| MORTGAGES. | 1880–81. | 1885–86. | 1890–91. |
|---|---|---|---|
| 1. Area mortgaged - - Acres | 230,337 | 496,485 | 430,809 |
| 2. Total amount of mortgage - Rx. | 421,079 | 1,038,732 | 1,334,093 |
| 3. Average per acre - - - Rx. | 1·8 | 2·1 | 3·1 |
| 1. Area redeemed - - Acres | 66,078 | 159,883 | 220,123 |
| 2. Total redemption money - Rx. | 66,818 | 206,731 | 511,807 |
| 3. Average per acre - - Rx. | 1·0 | 1·3 | 2·3 |

Ornaments.

The question of how far the Indian people are in the habit of accumulating ornaments, as a way of disposing of their savings, is one which has been brought into prominence of late in connection with the recent changes in the currency law. In the Panjab three or four years ago a special inquiry was made into the gold and silver industries of the Province, in the course of which it was shown that the Panjabi was very addicted to profusely loading his women-kind with jewelry. The report states: "Europeans in dealing with the subject are far more inclined to under than to overvalue the amount of ornaments which a native family, in whatever rank of life, possesses; and yet, every day, in large civil cases, in suits for dower, in dealing with ward's estates, in cases of elopement, thefts, burglaries, murders, and a thousand other ways, civil officers are constantly being confronted with this enormous mass of wealth lying in the coffers of the people." Instances are then given in support of this assertion, which, indeed, is by no means restricted in its application to the Panjab.

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Prices of agricultural produce.

There is the course of prices, again, to which reference may be made in connection with the profits made by the agriculturist. The grain produce, taken all round, has risen 30 per cent. in its rupee value within the ten years under review. The other side of the question, however, must not be ignored, and the above rise has seriously affected those who live on salaries or other fixed cash payments. These are, however, numerically speaking, a small class, as the wages of the agricultural labourer and the rustic artisan are chiefly paid in grain. A note, moreover, on the development of industrial occupations in towns by Mr. J. L. Kipling, the well-known Superintendent of the Mayo School of Art in Lahore, seems to indicate that even the cotton-weaving industry, reputed to be on the wane, is healthily employed in working the coarser class of yarns now obtained from European and Indian mills into strong goods, which hold the market against machine competition. Locally made woollen goods are rising in quality and in demand amongst the upper classes of the Panjab, where the winter necessitates a supply of warm clothing. Carpentery and ironwork are also flourishing, though the latter, on account of the want of a local supply of fuel, has to be conducted on a small scale. There has been a great development of the tinman's trade of late years, fostered by the amount of material available in the emptied kerosine oil cans, whilst the leather workers, the lowest in the ranks of artisans, have profited both by the sale of tanned and manufactured articles, and by the largely increased trade in hides for export.

Artisans.

Wages and diet.

Wages, as in other parts of India, are paid on a cash basis in comparatively small proportion. In towns there has been a rise, though it is probable that, as elsewhere, it still lags behind that which has taken place in prices. The bulk of the wage-receiving class, field and industrial, is paid in grain, so that the remuneration remains comparatively little in advance of what it was 10 years ago, considering the great improvement in the agricultural circumstances of their employers. The mean daily ration of the latter is taken at 1·85 lbs. of grain per head and consists, roughly speaking, of 33 per cent. wheat, 54 inferior grains, and 13 pulse. The non-agricultural population vary this. Their ration is estimated at 1·50 lbs. only, but it is composed of ·48 wheat, ·38 inferior grains, and ·14 pulse, and so makes up in quality for the slight deficiency in weight. The meat-eaters of the Panjab, as was remarked above, are relatively more numerous than in other parts of the country, but speaking generally, and the observation is applicable beyond the limit of this Province, a change or improvement in the diet is far later in being adopted than the alternatives of substituting metal for earthenware in the household vessels, the piling up ornaments for the use of the women of the family, or, unfortunately, the expenditure of more money on weddings.

## NORTH-WEST PROVINCES AND OUDH.

NORTH-WEST PROVINCES AND OUDH.

Keeping still to the north of India, the next Province that comes under review is that which occupies the upper portion of the Gangetic basin. The circumstances of the two sections into which it was, until 1877, administratively divided, are somewhat different, as Oudh lies chiefly within the influence of a nearly certain rainfall, whilst in the western and southern portions of its neighbourhood, the seasons are notoriously precarious. Thus in the ten years under review, though there has been no general failure of any harvest, the agricultural conditions have been anything but favourable. For the first three years, the rainfall was below the average, whilst since 1884, the seasons have been continually marked by excessive or ill-distributed moisture, especially during the time the autumnal crops were in the ground. On the other hand, the winter crops have been fairly good. The result is that whilst the two divisions of Oudh show an increase in population of 12 and 10 per cent., respectively, and Kumaun and the Eastern Sub-Himalayan tract of the North-West Provinces, one of 11 and 13, the highest rate in the rest of the Province is but four, whilst the Agra division has lost to the extent of 1½ per cent. As regards the urban population, which here bears the ratio to the total of 12·7 in the North-West Provinces and 7·6 in Oudh, the same may be said as of the corresponding class in the Panjab, namely, that it is only increasing rapidly in a few of the larger centres. On the whole, the urban increase has been at the rate of 2·3 per cent. in the larger

NORTH-WEST PROVINCES AND OUDH.

larger section, against a general rate of 4·5, and in Oudh of 6·2 against 11·1. The purely agricultural portion of the community numbers about 62 per cent., but the labouring and semi-agricultural classes are more numerous than usual, raising the proportion of those dependent on the soil to nearer three-fourths.

Cultivated area.

The most important question, therefore, in regard to the condition of the people is the agricultural outlook. The area cultivated is the first point to notice. There is some doubt as to the correct figures for the early part of the decade, but, assuming them to be approximately accurate, this area rose by some 465,000 acres, up to 1887, when there was a decline of 320,000, so that, on the whole, the 41,646,000 acres returned in 1891–92 represent but a nominal advance on that of ten years back. It is advisable, however, to distinguish the temporarily settled tract from the rest, for which the statistics are not complete. In the former, the net area cultivated in 1881–82 was 22,135,000 acres, against 22,183,000 in 1891–92, the fresh land broken up in the sub-Himalayan districts of Gorakhpur and Basti being counterbalanced by the 500,000 acres thrown out of cultivation in the waterlogged tracts of the Agra division and the grass-choked valleys of the South. In Oudh the advance was from 8,819,000 acres in 1885–86 to 8,907,000 in the last year of the decade. But though the area cultivated shows so slight an increase, that under crop has risen very considerably, owing to the extension of the system of getting double, and near large towns even treble, crops off the land each year. The area thus treated seems to have increased from 7 per cent. of the cultivated area to 15, or, in absolute numbers, from 2,370,000 acres (in the North-West temporarily settled tracts) to 4,502,000, or, taking the whole of the combined Provinces together, from 6,511,000 acres in 1886–87, the first year for which full details are available, to 7,785,000 in 1891–92. The greater part of the increase in this practice is due, no doubt, as in the Panjab, to the stimulus given by the higher prices now obtainable for food grains and such valuable products as sugar cane, but on some occasions it is unfortunately attributable to the failure of the early sowings, the area under which is not, as in the Panjab, deducted in those circumstances from the annual return. The question has been raised in connection with this system of cultivation, whether the soil is being thereby exhausted or not? On this point the evidence is to the effect that along canals the high rates for the more copious supplies of water are paid year by year without hesitation, whilst the outturn from the land on which they are fixed does not diminish. Two instances are quoted. In 1836 a complaint of deterioration was made to a British officer on tour in the Meerut division, but in 1892 the same tract yields one of the heaviest crops in the whole Province. Again, in Basti, at the other end of the Province, it is found that fallows are almost unknown, though at the earlier settlement it was alleged that every portion of that district had periodically to be abandoned, in order to give it rest, and the experience of the latest inquiries has proved that the tracts continuously cropped for 30 years are still the most productive in the district. On the whole, though the general conclusion must be that deterioration is not proved to have yet set in, the Director of Agriculture, who in this Province has special opportunities of testing the matter, is apprehensive lest the anxiety of the peasant to take advantage of the demand for exportable produce may not induce him to over-crop before he has learnt the best method of restoring to his land more of what he takes out of it than he does at present.

This conclusion leads up to the distribution over the cropped area of food and non-food crops respectively. It is here safe to take the figures for the temporary settled districts of the North-West Province only, as those for Oudh and the permanently settled tract are not complete. The marginal statement gives the respective areas for three years out of 11. It will be seen that whilst the food-crops have continuously spread, the others, owing chiefly to the discontinuance of indigo cultivation and of cotton-growing in the west and south, have declined. It is curious to find that the return shows a decrease in the area under wheat, though the foreign demand is known to be still high; but it seems that the variation is probably in the record only, and is attributable to the neglect of area in which wheat is not the sole crop. In seasons

| Crop. | 1881–82. | 1886–87. | 1891–92. |
|---|---|---|---|
| | Acres. | Acres. | Acres. |
| Food - - | 20,609,000 | 21,574,000 | 22,792,000 |
| Non-Food - - | 3,896,000 | 4,307,000 | 3,893,000 |
| TOTAL - - | 24,505,000 | 25,881,000 | 26,685,000 |

seasons of heavy rainfall just before ploughing, it is well-known that the peasant of these parts mixes with his wheat another cereal or some sort of pulse. On the other hand, the excessive rain has given an impulse to the cultivation of rice on land which was formerly reserved for millet at the summer sowing. In many parts of the Province sugar cane is regarded as the crop that pays the assessment or rent, the rest being for sustenance and cultivation expenses. It is satisfactory, therefore, to find an increase in the decade of over 30 per cent. in the area under this product. NORTH-WEST PROVINCES AND OUDH.

The area under irrigation is very considerable in these Provinces, though not so important as in the Panjab. The marginal table shows the main figures for the temporarily settled districts and for Oudh. The heavy rainfall in the former favoured the use of tanks for some years, and rendered the wells useless. The latter therefore decreased from 760,224 to 694,476, but have since risen again to 712,235. The canal mileage has increased from 1,306 to 1,464, and the distributaries from 5,529 to 6,706, or, in all, nearly 20 per cent. With all the heavy rainfall of the last six or seven years, however, they have worked at some disadvantage, and in one or two instances were actually harmful for the time to the health and agriculture of the surrounding tract by retaining an excess of moisture below ground throughout the year. Irrigation.

| Area irrigated from | 1881–82. | 1886–87. | 1891–92. |
|---|---|---|---|
| | Acres. | Acres. | Acres. |
| Canals | 1,514,719 | 1,137,099 | 1,639,258 |
| Wells | 2,898,736 | 2,209,321 | 3,041,363 |
| Tanks, &c. | 1,365,856 | 1,294,893 | 1,623,096 |
| TOTAL N.W. Prov. | 5,779,311 | 4,641,313 | 6,303,717 |
| Wells | — | 956,015 | 1,217,497 |
| Tanks, &c. | — | 1,313,431 | 1,438,751 |
| TOTAL Oudh | — | 2,269,446 | 2,656,248 |

The question of the sufficiency of the food supply of the Province has to be considered in the two aspects in which it was dealt with in the case of the Panjab. First, whether the produce of the Province itself is sufficient to support its population, and, secondly, whether there is a class of the latter which habitually hovers dangerously near the margin of subsistence. As regards the first, it may be remembered that just before the opening of the decade under consideration the Famine Commission estimated that in an average season there was a surplus of some 660,000 tons of food grain, which however was liable to serious reduction at an inferior harvest, and to extinction in time of drought. Since this estimate was framed the population has increased by over 6 per cent., and the cropped area by about two and a quarter million acres, partly due to expansion over fresh land, but partly also to the increased demands imposed upon land already in occupation. According to the calculations of the Commission this additional area should provide food for about three and a quarter millions of population, which is one and three-quarters million below the actual increase. The excess accordingly trespasses upon the above quoted estimated surplus, reducing it by about one-half. Making allowances for variations in season the consumption and produce approach dangerously near equilibrium, though the effects of the extension of irrigation and of the several bad harvests in succession of late, must be allowed weight on the more favourable side of the balance. The marginal statement of the movement of food grains shows that except in bad years there is a surplus, though it seldom amounts to the 300,000 tons above mentioned. At the same time the variations indicate that the increased foreign demand for wheat has not affected the supply of other food stuffs, as they distinctly move in harmony with that produce. Food supply

| Year. | Food Grain in Ton-Thousands. | | | | | | |
|---|---|---|---|---|---|---|---|
| | Exported. | | | Imported. | | | Exports compared to Imports. |
| | Wheat. | Rice and others. | Total. | Wheat. | Rice and others. | Total. | |
| 1885–86 | 299 | 162 | 461 | 5 | 56 | 61 | +400 |
| 1886–87 | 239 | 111 | 350 | 3 | 91 | 94 | +256 |
| 1887–88 | 122 | 86 | 208 | 14 | 173 | 187 | + 21 |
| 1888–89 | 147 | 79 | 226 | 11 | 76 | 87 | +139 |
| 1889–90 | 103 | 145 | 248 | 10 | 37 | 47 | +201 |
| 1890–91 | 53 | 70 | 123 | 39 | 247 | 286 | −163 |
| 1891–92 | 363 | 117 | 480 | 6 | 119 | 125 | +355 |

The extension of communications must be taken into account here. Railways have increased in mileage from 1,358 to 2,699 in the decade, and the system of roads, which in most parts of the Province is extensive and well maintained, has Communications.

North-West Provinces and Oudh.

has been adapted to the new circumstances. The valuable forest tracts of the north of Oudh, the fertile districts between the Ghogra River and the hills, and most parts of the southern division have been now connected with the centres of provincial commerce. The Bundelkhand Hills are now the only tract where communication is at all difficult; and even here much has been done in bridging and metalling roads of late years. The trade on the lines of rail, where it has been registered, shows since 1881–82 an increase of 53 per cent. in weight and 23 per cent. in value. The traffic on the River Ghogra and with Nepal and Thibet, too, has grown considerably, though not in proportion with that on the railway. Passenger traffic between stations within the province is also a fair test of the spending power of the people on a benefit which they appreciate so highly, and it appears that where in 1881 the number of passengers on the Oudh and Rohilkhand line was 2,632,000, it was in 1891 5,254,000; and on the East Indian line the increase was from 2,437,000 to just under 4,000,000.

Prices.

In connection with prices, the value of the opening out of the country is more marked than in the Panjab, because the uncertainty of the season entails so much more transfer of food from one part of the Province to another. For instance, in 1883-84 there was a failure amounting to about three-quarters of the food supply over a large area, whilst in many more tracts the harvest was deficient to a less degree. But prices neither rose nor showed the violent oscillations to which they were subjected in such circumstances before communications were developed, except in the outlying hill tracts and the trans-Ghogra districts, and these, too, have since been brought into the general system. But, on the whole, the price of food-grain has risen 40 per cent. since 1861 and 25 per cent. since 1880. A new standard, it is stated, was established about 1870, after the abatement of the fluctuations during the disturbed times of the sixties, and for 17 years prices showed a slow upward tendency. In 1887, however, there was a sudden rise, which is still in progress, and promises to be maintained. This is, in fact, attributed to the extension of railways, which allows a producer to steady the market by not selling his harvest as soon as it is reaped at the price offered by the village grain dealer, but to realise favourable rates all the year round, through the influence of the larger markets, which he attends in person, and the operations of which he thoroughly appreciates. On the other hand, railways have cheapened to the consumer a number of imported articles formerly luxuries, but which may now, under a rise in standard of life, be held to be necessaries, and are sold in nearly every village; but on this subject more will be said hereafter.

| Period. | Relative Price. |
|---|---|
| 1861–65 | 100 |
| 1866–70 | 127 |
| 1871–75 | 121 |
| 1876–80 | 124 |
| 1881–85 | 111 |
| 1886–90 | 136 |
| 1891 | 167 |

Land assessment.

The Government demand on the land in this province has shown an inclination to fall relatively to the estimated value of the agricultural produce, as shown in the marginal statement. The policy with regard to enhancements of assessments on revision of periodical settlements is to approximate the rate to half the net rental assets, though exceptional circumstances are allowed to weigh in varying on either side of the standard. The assessment is fixed on ascertained actuals, instead of on estimates of potential rents, whilst tenants are equally protected against undue pressure, and when the enhancement is severe the full amount is not levied at once. The amount assessed has increased in the ten years, as shown marginally; but, as compared with the former settlements in the more backward or peculiarly situated districts, the actual amount is decreased. Banda, for instance, on acquisition yielded Rx. 200,000 in 1842; the settlement was for Rx. 162,700; and at present the amount stands at Rx. 117,100. In Cawnpore, again, the first settlement was for Rx. 235,900, and in 1890 the demand was Rx. 215,900

| Year. | Estimated Value of Produce. | Assessment. | Percentage of Assessment on Produce. |
|---|---|---|---|
| | Rx. | Rx. | |
| 1880 | 83,052,500 | 5,667,500 | 6·8 |
| 1891 | 101,295,500 | 5,939,500 | 5·8 |

| | 1880–81. | 1886–87. | 1890–92. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| North-West Provinces | 4,291,753 | 4,286,255 | 4,497,587 |
| Oudh | 1,392,191 | 1,403,579 | 1,412,184 |

Rx. 215,900. The cesses on land come to about 16 per cent. of the assessed revenue, or 8 per cent. of the rental assets. The incidence per acre of both revenue and cesses is shown marginally. The highest revenue incidence on cultivated land is found in Cawnpore, where it rises to 2¾ rupees. In Oudh the corresponding rate is about 2¼ rupees in Bara Banki. The lowest rates in the two divisions are in Lalitpur, just under half a rupee, and in Khari, about 1$\frac{1}{16}$ rupee. The total amount in 1891 was Rx. 6,769,675, including cesses, or about 1½ rupees per head of population. The statistics of collection and arrears indicate that the burden is by no means heavy. In the group of districts in or round the Agra division, already mentioned more than once as showing, with the southern tracts, the worst agricultural position in the province, the pressure has been unduly heavy in the circumstances that have prevailed nearly throughout the decade. These districts were severely visited by the famine in 1877–78, and before they could recover nearly the whole of the arable land was saturated by the frequent flooding they received year after year from the excessive rainfall. Then, to add to the untowardness of the seasons, the inroads of wild animals, such as pigs and cattle, from the preserves of the Chief of the adjoining State of Bharatpur necessitated special measures of fencing, by which means cultivation has somewhat revived. In the Bundelkhand tract, again, the excessive growth of weeds and grass has checked cultivation and caused difficulty in paying the assessment, so that a special inquiry, with a view to reducing the demand, has been instituted by the Local Government, but was not concluded by the end of 1891–92. In other parts of the Province, and throughout Oudh, not only the former assessment, but the largely enhanced rates of the revised settlement, have been paid without serious difficulty. It appears, however, that the number of attachments of movable property in cases of default has increased considerably of late years, from which it might be assumed that greater pressure was now required to collect the assessment. This, however, is true in comparatively few cases, and those in the tracts suffering from successive failures of one or other of the two harvests. In Oudh there has been no such increase. But the difficulty of collection seems to be growing proportionately with the decadence of the principle of joint responsibility. The individual is so well protected in the present day that he is apt to dissever himself from the community with whose joint life he was formerly indissolubly connected, and the average number of sales, which is only 3½ per cent. on the attachments, shows that the former process is no more than a means of ascertaining who is the person really responsible for the payment.

NORTH-WEST PROVINCES AND OUDH.

| Incidence per Acre. | Land Revenue. | Cesses. | Revenue and Cesses. |
|---|---|---|---|
| North-West Provinces: | Rupees. | Rupees. | Rupees. |
| On total - - - | 1·046 | ·162 | 1·208 |
| „ cultivated - - | 1·687 | ·265 | 1·952 |
| Oudh: | | | |
| On total - - - | ·984 | ·156 | 1·140 |
| „ cultivated - - | 1·698 | ·265 | 1·963 |

In this Province the position of the tenant is an administrative question of the highest importance. The competition for arable land has in a great proportion of the districts reached a pitch where it is necessary for the State to step in to ensure the cultivator fixity of tenure at a fair rent, in order to let him have any chance of sharing in the general improvement consequent upon the peaceful development of the resources of the country round him. The measures for his protection need not be discussed in detail. In the North-West Provinces custom had long distinguished tenants with rights of occupancy from tenants-at-will, and the present system, stereotyped by the Acts of 1859, 1873, and 1881, is found to conduce to harmonious relations between proprietor and tenant. In 1891, 23 per cent. of the land was held by proprietors, 36 by tenants with rights protecting them from arbitrary enhancements or eviction, and about 30 per cent. without such rights. The remaining 11 per cent. is held, for the most part, on quasi-occupancy rights. In Oudh the tenant was found to be far more at the mercy of the proprietor, but his position is now secured, as far as possible by an Act passed in 1886. The principle on which the system is here based is not prescription, but the wider ground of regard for the agricultural prosperity of the country. About 11 per cent. of the area is now in the hands of proprietors; about 7 per cent. by privileged tenants and sub-proprietors, and 82 per cent. by statutory tenants, under the above Act. The evidence as to the relation between landlord and tenant afforded by the returns

TENANCY.

North-West Provinces and Oudh.

returns of application for ejectment is by no means conclusive, since in the great majority of instances the proceeding represents no more than a signification that arrears due must be paid up. Actual eviction took place in 1887-88 from about 4 acres per 1,000 occupied by tenants with rights, and from 19 acres in the case of tenants-at-will, but the proportion rose somewhat in the three following years, owing to the hard times in the two divisions already mentioned. In Oudh, the new Act has worked well in this respect. The notices during the year before its introduction reached 92,451 in number, whereas in 1890-91, they were only 8,422. The keen competition for land, owing to the greater profits of cultivation now ruling, has forced up rents unduly under various expedients for evading the law of enhancement, and it is only now that letting prices are reaching a normal level. The Act, however, secures the tenant for at least seven years, and if rent be not paid in a bad season, the landlord can recover no more than the statutory amount. In connection with the above remarks, the marginal table of the relative increase in assessments recently revised in the North-West Provinces is of interest. The increase in rent-rates in certain districts in Oudh, now under revision, is also worthy of note. In Bulandshahr the rental assets show an increase of 68 per cent. In some of the Oudh districts tenants sublet at from six to eight times the statutory cash rent.

| North-West Provinces. | 1884-85. | 1890-91. |
|---|---|---|
| To evict occupancy tenants | 15,335 | 20,751 |
| To evict tenants-at-will | 52,862 | 57,875 |

| North-West Provinces Districts. | Enhancements of Assessments. | Oudh Districts. | Enhancement of Rent Rates. |
|---|---|---|---|
| | Per cent. | | Per cent. |
| Bulandshahr | 50 | Unao | 43 |
| Basti | 47 | Hardoi | 26 |
| Gorakhpur | 44 | Rai Bareli | 32 |
| Muzaffarnagar | 24 | Sultanpur | 35 |
| Saharanpur | 26 | Bara Banki | 37 |
| Jalaun | 20 | | |

Standard of living.

Two other subjects connected with the peasantry of this province claim attention. First, their standard of living, and then the prevalence of indebtedness amongst them. As to the first, it may be remarked that a rise in the standard of life is implied throughout all the arrangements made by the State, as above described, for the protection of the tenantry, or else those efforts would end simply in handing over to the landlord or money-lender all the advantage of increased profits of agriculture. But it is found that the tenant no longer trusts himself entirely to the village shopkeeper, who combines the functions of money lending and grain dealing, but, as stated already, enters the market in person. He is also more given to upholding his tenure against encroachments by his landlord. The inquiries made in various parts of the Province show conclusively that the peasant has acquired taste for a better class of food, clothing, &c., and can indulge it. Salt, brass vessels, kerosine oil, and so on, have got cheaper. and far more of each is consumed than heretofore. The style of house is improved, oxen are substituted for buffaloes at the plough, and the women and children are better clothed.

Agricultural indebtedness.

Indebtedness has been said to be the normal condition of the agriculturists in this Province. In the case of the upper classes of proprietor, it is attributed to litigation or personal extravagance, and requires no notice here. Of the peasantry it is estimated that nearly three-fourths have to go to their money-lender to enable them to tide over the interval between the spring and the autumn season. On the other hand, it is admitted on all sides that in the class in question debt is a sign of credit, and therefore of respectability, and so far from being chronically insolvent, as the term is understood in western countries, they are in the position of those who "work on borrowed capital, or keep a running account with a tradesman." The gravity of the question, therefore, obviously varies with the productiveness of the tract, and still more, the certainty of the harvest. The causes of debt here are the same as all over India. A few successive bad seasons, extravagant expenditure on domestic ceremonies, hereditary responsibility for family liabilities and the monopoly by the village money-lender of all grain-dealing, may be mentioned as amongst the chief. As regards the first, the system of suspending for a time the collection of the State assessment in cases of proved necessity, has been liberally extended of late years, for, though, as shown above, the incidence is light, its invariability occasionally presses heavily on a tract of precarious rainfall, such as the Agra and

and Bundelkhand divisions of the Province. The second and third causes are practically beyond State control, nor do they show signs of material diminution in prevalence on the hold they have over popular sentiments. The last, as repeatedly mentioned, is giving way more or less rapidly with the increase of foreign trade, or central grain marts, and the extension of railways. In supplement of what was stated above regarding the connection between credit and social esteem, the opinion of local inquirers may be quoted that in both sections of the province the amount of debt varies directly with the rank or caste of the borrower. The nearer the tenant approaches to the position of a field labourer, the less are his liabilities, whilst the heaviest debts are found in the families of the high-caste proprietors, great and small. In fact, the borrowing power increases with the value of land, and though it is proved by the records of early settlements that indebtedness was widely prevalent before British rule, and is thus no new experience to the peasantry and landed classes generally, the long subsequent period of peace and security of tenure with the growth of agricultural profits has raised credit amongst a class which had never hitherto enjoyed it, and who have, as is to be expected, revelled in the luxury to excess. The political importance of the tendency shows itself here, as in the Panjab, when the possession of the land begins to shift from the agricultural to the money-lending classes. It is said that the transfer of land to the latter is, as a rule, less frequent now than a few years ago, owing to the keen competition of both proprietors and tenants of the neighbouring estates. But the case of Jhansi has been a valuable object-lesson in this respect, and in spite of all the elaborate arrangements made by State agency between 1882 and 1886 for liquidating debt without the alienation of the land, and the indirectly beneficial results on the population, the little permanent good that has been effected can be appreciated from the fact that in many cases the advance obtained from the State by the landholder has been repaid only by borrowing from the money-lender, to whom the property in question was consequently sold, or who, as soon as it was freed from debt, took out execution against it through civil suit. The chief revenue official in this tract remarks in regard to the general result, that "the problem of retaining landed property in the hands of the old proprietors by any means less drastic than by suspending the sale provisions of the Civil Procedure Code is as far from solution as ever." His opinion is confirmed by what has taken place with regard to the lands transferred to his district in 1886 from the Gwalior State, which, as soon as they were discovered to be saleable, began to pass from the possession of the agriculturist with such rapidity that the special Act, under which the rest of the district had been temporaily freed from debt, had to be extended to the newly incorporated territory. Finally, in connection with this important subject, it appears that the security of administration and the aid given by the civil courts in recovery of debt have not lowered the rate of interest, which ranges in cash transactions from 24 to 36 per cent., and 50 per cent. on grain loans, with the addition of such advantage as the creditor can secure from the difference in prices at sowing and at harvest time. Little advantage has been taken of the system of State advances for agricultural purposes, though, as indicated in the marginal table, there has been a slight upward movement of late years. The objections to the system are the same as elsewhere, and have already been mentioned in other parts of this review. On the whole, the facts recorded seem to show that the indebtedness of the agricultural community has not reached proportions that need occasion any apprehension, nor has it stood in the way of a rise in the standard of life, a keen competition for land, with the ability to pay a higher price for the use of the latter to its owners. Compared with other factors in the life of the peasantry, such as the uncertainty of the rainfall, with a population that is nearing the limits of agricultural production, the burden of debt may be said to be in most parts of the Province insignificant.

North-West Provinces and Oudh.

| | 1880–81. | 1886–87. | 1890–91. |
|---|---|---|---|
| | Rs. | Rs. | Rs. |
| North-West Provinces | 19,196 | 13,155 | 61,923 |
| Oudh | 34,870 | 6,409 | 17,768 |

The notable rise in prices that has been so advantageous to the agriculturist, has necessarily been no matter for congratulation to the rest of the community. Those especially who live on cash salaries are much straitened in their resources, and naturally regard any rise in the circumstances of those below them in social rank with anything but equanimity. The artisan community has, on

The non-agricultural population.

North-West Provinces and Oudh.

the whole, profited by the new conditions, largely owing to the extension of public works entailing the employment of the old-established village industries of the carpenter, mason, blacksmith, and brickmaker. The hand-loom weavers, as usual, were much reduced at first by the competition of European goods, but have now revived under the influence of Cawnpore and other spinning centres, which supply them with yarn of a quality suitable to their class of work, so that their outturn meets with ready sale in the rural tracts. The goldsmith, again, in the villages, reaps the advantage of the agricultural prosperity, since it connotes the extension of the demand for ornaments given as dower at betrothal, as well as of the ordinary conversion of corn into a form of investment that appeals more to the eye than the far-off operations of the stock or share market. As for the wage-receiving classes, the evidence is in favour of a rise in standard, though not, of course, to the same extent as there has been a rise in prices of food. Public works, the large leather and cotton factories of Cawnpore and other principal towns, and the busy traffic during the grain operations along railways, have all helped to render the lower class of village menial independent of the casual allowances made him from the harvest of his own community, and it is stated that in consequence of this competition the labour market at times of special demand, such as for the wheat and sugar-cane crops, is able to impose its own terms, so that the proprietor of the old school is everywhere given to complain of the exaltation under British rule of the class whose touch is to them absolute pollution. The estimates of cash wages are not altogether to be trusted; but such as they are they show a rise of from 7½ rupees per mensum in 1880 to 10 rupees in 1890 for skilled artisans in Cawnpore; from 8 to 9 rupees in Faizabad; and from 9 to 14 rupees in Meerut. The mean rates of wages of agricultural and unskilled labour are more difficult to estimate, as the former is so much paid in kind, food or clothing, but the large immigration of foreigners on any extensive public work shows at all events that the local population do not think it worth their while to undertake such tasks as are there required. The general opinion seems to be that it is none the less owing to these large undertakings that the rise in wages is due, and that this rise amounts to about 50 per cent. in the case of unskilled labour, whilst the wages of artisans have improved to an even greater extent. The rise in the price of food, therefore, which would otherwise have seriously affected both these classes, has thus been somewhat counterbalanced.

Taking the Province as a whole, there does not seem to be a prospect of any further rapid expansion of the population, except towards the north and east, where arable land of good quality is still to be had in large quantities. It is true that the latest returns show an area of 8,000,000 acres of such land in the North-West Provinces, and 3¼ millions in Oudh; but in the central portion of the Province the land remaining untouched is, in all probability, either liable to saline efflorescence, or inferior to that already in occupation; in the west, unless the drainage be improved, the large waste area cannot be used, and in the southern tracts the uncertainty of the rainfall and the broken nature of the country practically puts a stop to any considerable extension of the cropped area. Thus, throughout the greater portion of the Province the population must be considered as approaching within measurable distance of the stationary condition, unless a succession of good harvests, such as is not unknown in this region, imparts an unusual stimulus to multiplication. The alternative is the retrogression of the standard of living to what it was a few generations ago, which is always improbable, especially where, as in this case, the criterion of social position is very much the family expenditure on the marriage of its members.

The circumstances of this Province have been dealt with at some length, not only on account of the magnitude and variety of the material interests involved, but also because the economical conditions that here prevail seem to have reached a stage rather more advanced than those found in most other parts of India.

## BENGAL.

Bengal.

In Bengal, for instance, with its 71 millions of inhabitants, against the 46 millions of its neighbour, the conditions are simplified and localised by the practical immunity from widespread scarcity which is enjoyed by the greater part of the Province. Throughout the deltaic tracts the rainfall is plentiful, certain, and well distributed. In Orissa it fulfils at least two of these conditions.

conditions. In the hill tracts of Chutia Nagpur a comparatively light but timely fall satisfies the demands of a somewhat primitive system of cultivation. There remains Bihar, where, especially in the south-western tracts, the season shares to some extent the uncertainty of its neighbour to the north-west. The population of Bengal is, on the whole, the most dense in India; Oudh alone enters into competition with it in this respect. Not taking into consideration the hills tracts of Orissa, Darjiling, and Chittagong, the lowest specific population is found in the Palamau district of Chutia Nagpur, where it is but 122 per mile. Excluding the similarly exceptional tract round Calcutta, the highest density is returned from Saran, a district of north-west Bihar, where it reaches 930. The urban element is singularly wanting, and bears a proportion of only 4·8 per cent. to the total. With the exception of Calcutta and Howrah, the only large towns are Patna and Dacca, neither of which, as has been already shown, are flourishing as trade centres. On the other hand, owing partly to the influence of Calcutta and the urban tract of which it is the nucleus, partly to the growth of railway marts, the town population has advanced in the decade by 7·4 per cent., whereas the province as a whole has increased but by 6·9. In this respect Bengal differs from every other province in India, except Sindh and Berar. The proportion of the agricultural population, if the field labourer be included, is above the average, and exceeds 70 per cent. Owing to the prevalence of the permanent settlement system, which precludes the necessity of keeping full State records of cultivation, rent and so on, for administrative purposes, there is less information in detail about this class than is available in other parts of the country. In 1891–92 the cultivated area is returned as 52,828,300 acres, or about ·74 acres per head,* as compared with ·88 in the North-West Provinces. It is not recorded how much of the 35,863,000 acres of uncultivated land, exclusive of the 4½ millions returned as forest, is arable, as under this head are included the salt marshes of the delta, the beds of the large rivers, as well as the reserved forests. There is, however, considerable room for expansion in the Northern division, in one of the sub-Himalayan districts of Bihar, and in portions of eastern Bengal. Along the coasts, too, there are considerable tracts that can be dyked and drained into cultivable condition, as has been done with similar land in Burma. But on the whole the population has spread well over the more remunerative land. It may be noted, moreover, that some of the north and central tracts of the lower part of the Province have been rendered very unhealthy and in places almost uninhabitable, by the obstruction of the natural drainage caused by material changes in the course of the larger rivers. The Tista, for instance, has travelled 50 miles to the eastward in 120 years, leaving behind it a trail of marsh land, and two districts show a decrease in their population in consequence. Further to the south a similar change has taken place, in Nadia and Jessore, where the estuaries that used to run south-east have been deflected by alluvial deposit southward, leaving to the east a chain of extinct channels which every year become for a season malarious swamps. In south Bihar, again, it is said that the opening of the great Son canal has been attended by the same sort of waterlogging that has affected the Jamna tracts of Upper India, due to the obstruction of the natural drainage. In all these localities there has been abnormal ill-health during the decade arising from the above cause. The seasons, too, have necessarily varied, even in the most favoured tracts of Bengal, but only in 1891–92 has there been anything approaching a general deficiency in the harvest. In that year the whole Province suffered from scanty rainfall. Orissa was less affected than the rest, but in parts of Bihar the scarcity was severe, and a few small relief works were opened for the lower classes for a few months. The number who availed themselves of them, however, was not more than 7,000, out of a population affected of 463,000. A few more were given gratuitous relief, and in Muzaffarpur, too, another district within the zone of uncertain rain, some 3,000 people were given employment on State works. It is clear, therefore, that there was nothing approaching famine, or even widespread distress, even in localities where the failure of harvest was most marked. The evidence given by the above physical facts, taken with the returns of deaths from fever, even in the imperfect state of registration which prevails in the rural tracts of this Province, indicates that the low rate of increase in Northern and Central

Bengal

Cultivable and cultivated areas.

The seasons.

* Of this area 63 per cent. was under rice, the most prolific of Indian cereals, 9 per cent. under oil seeds, and nearly 4 per cent. under jute, the most profitable of fibres.

BENGAL.

Bengal is due mainly to the malarial conditions, which have shown a tendency to increase in intensity of late years. The same conditions, though on a much smaller scale, are found in the south-west of Bihar, and in this latter tract sanitation is more difficult owing to the custom of the rural population to congegrate into large and compact villages, each possessing all the unhealthy elements of a town, instead of scattering over the arable land in small hamlets or detached homesteads, as in the eastern districts. There is no doubt that with the exception of a few districts the tendency in the Province is for the wellbeing of the people, as a whole, to increase from west to east. This is attributable in part to the more certain rainfall in the latter region, partly to greater freedom in diet, and partly, no doubt, to the fact that the tenure of land is in the east more favourable to the masses than it is in the west. Orissa and Chutia Nagpur being altogether exceptional tracts, are not included in the scope of this remark.

It seems advisable, accordingly, to treat separately each of the principal divisions of this populous and varied Province; but before doing so there are a few general features that deserve comment. In the first place, there is the comparatively light burden of the State assessment on land, the incidence being only ·609 rupees per head, or ·547 per acre, The highest rate per acre is ·990 rupees in Burdwan, and the lowest ·041 rupees in Chutia Nagpur. The permanently settled estates yielded Rx. 3,492,727 in 1891-92, and Rx. 3,525,412 in 1881-82. Other sources of land revenue increased in the decade, so that the total rose from Rx. 3,786,192 to Rx. 3,816,217. Roughly speaking, the rent demanded by the proprietor amounts to about five times the assessment, but the practice varies greatly from tract to tract, according to the nature of the population. In Eastern Bengal, where the landlords are chiefly absentees, the peasantry, who differ to a considerable extent from the superior holders in race and religion, are strong enough, it is said, to resist excessive enhancement. In the Central districts, as well as in the Northern, the class of absentees is said to be increasing. In the latter the relations between the two classes verge on those which prevail in the Eastern division, but the working of the Tenancy Act is stated to have been efficient in keeping the ill-feeling from spreading. The tenants in the vicinity of Calcutta, again, avail themselves of legal advice to a sufficient extent to keep within due bounds the demands of the proprietors or their local agents. Burdwan shows the highest assessment of the Province, because at the time of settlement it differed from the other divisions in being fairly well populated. A system of alienating the proprietary rights to smaller landholders by the Zemindar soon after the permanent settlement was made has tended to raise up a class of superior landlords without sufficient means to improve their property, but who have let and sublet the latter till the actual cultivator has no one above him with any interest in the land save that of making a living out of it for the time being. A somewhat similar class is said to be rising in the south-western corner of Bihar, where, in other respects, the the tenants have their rights well protected by local custom. In north-east Bihar, where the assessment is but ·312 rupees per acre, competition has driven rents up to the utmost the land can bear, and in the north-west, too, the landlord has the upper hand for the same reason. The subdivision of holdings has been carried to an extreme point, and so the small proprietors, who are often of high caste or social position, are in perhaps a worse condition in relation to their traditional means of subsistence than those below them. There is comparatively but little land in Orissa under the permanent settlement, and a general survey of the division is in progress. The assessment averages but ·406 rupees per acre, but there has been friction of various kinds between the tenants and their landlords, which will be set at rest by the Record of Rights now in hand. Only a portion of the Chutia Nagpur tract is under permanent settlement, and in the rest, which is administered as a Government estate, the assessment is hardly more than nominal. The relations between landlord and tenant, however, are described as armed peace, varied by open resistance; but the population is here less dependent on agriculture for a living than in parts of the country more orthodox as to religion, and lives by means reprobated amongst the dwellers of the Ganges valley.

State assessment on land and tenure.

Communications.

There is, next, the extension of communications in Bengal, which has been very considerable during the last few years. In the Delta proper the numerous estuaries and smaller channels are open to boat traffic all the year round, and during

during the rainy season no other means of travelling is possible. On the great rivers, too, the steamer service has been much strengthened, both between Calcutta and Dacca, and Bengal and Assam Railways, of which there were 2,196 miles open in 1882-83, now extend over 4,159 miles. Metalled roads, as means of through communication, are, from the nature of the country, unnecessary in much of the Province, and their mileage is accordingly only 4,223. The navigable canals, especially those into Orissa, have been much used of late. On the latter cargo valued at Rx. 286,122 was carried in 1881–82, whilst in 1890-91 the value had risen to Rx. 852,155. On the whole, the railways have now brought the thickly peopled labour-markets of Bihar within touch of the tracts where there is a demand for their aid, such as Assam, Calcutta, and Eastern Bengal. The dryer portions of Bihar, where they are not served by rail, have been well supplied with local roads. The through line from Nagpur cuts through the southern districts of the Chutia Nagpur division, and Orissa is saved by its canals from a repetition of distress like that of 1866, and is likely to be brought into connection with its southern neighbour on the completion of the East Coast Railway. The Assam line, which will serve Chittagong, is as yet in its infancy. One of the earliest effects of improved communication is already abundantly manifest in Bengal, and that is the equalisation of the price of food grain throughout the Province. That price too has on the whole risen, though owing to the comparatively bad seasons in part of Bengal for the last few years the true rise does not appear in the returns, owing to the abnormal fluctuations of late. Taking, however, the year 1890 and comparing it with the average of the four years preceding 1881, the increase is about 4 per cent. in the lower Delta, nearly 6 per cent. in eastern Bengal, 11 in central, 21½ in northern, and 20 in Chutia Nagpur. In Orissa rice seems to have fallen, though since 1884 it has risen slightly. In Bihar, too, the price during the four years above mentioned was remarkably high, so that there is but an insignificant rise above it in 1890; but it appears that in both divisions there was a retrogression in the earlier years of the decade, from which there has been some recovery. As elsewhere, the price of imported goods seem to have somewhat fallen, so that their consumption is stated to have largely increased of late. The ports of Bengal, especially Calcutta, supply such a vast stretch of country not included within the Province that the growth of the foreign trade cannot be brought into connection with the present topic. The marginal figures, however, are interesting as showing the development of the purely provincial traffic. There is, necessarily, a good deal of interchange between railway and river, as the former is extended and the country boat is superseded. In connection with the trade of the country, too, it may be remembered that amongst the agricultural products figure rice, jute, indigo and opium to a larger extent than in any other part of India. Tea, too, has extended all along the sub-Himalayan region, and rivals that of Assam. The cultivation of these crops is, no doubt, local, and the last is almost entirely in the hands of foreigners, but in eastern Bengal, jute, and in Bihar, opium and indigo, play a considerable part in the operations of the native cultivator, and help him over many a hard month or two between his rice harvests.

Bengal.

Prices.

| — | 1881–82. | 1891–92. |
|---|---|---|
| | Rx. | Rx. |
| Chittagong (Inland) | 612,692 | 968,955 |
| River Steamers - | 4,939,808 | 7,429,096 |
| Railway Steamers - | 3,593,936 | 4,596,510 |
| Nipal, Sikkim, &c. - | 1,356,117 | 2,134,279 |

We pass now to the consideration of the circumstances of the cultivating classes in the different divisions of the province, beginning with the Eastern tracts. Here there is little cause for apprehension of dearth, even at the present rate of the increase of the population, for the land is not yet fully occupied, is lightly assessed, and in the hands of a tenantry well able to take care of its own interests. The standard of living is high, and fish, flesh and fowl all enter into the peasant's diet. Rice is the principal food-crop grown for home use and for export, but jute has been the tenant's stand-by for some years past. In 1890–91, however, the production was overdone, and the market glutted, so that the cultivator was brought down to rather a low ebb in spite of the high price he got for his rice. But his general condition is decidedly prosperous. His standard of life has been raised in the way so usual in India; that is, nearly every house has its supply of ornaments, brass or gun-metal is substituted for earthenware in the household utensils, kerosine oil, matches, and European umbrellas are seen where twenty years ago they were unknown. It cannot be said that there is much tendency towards thrift

Eastern Bengal.

BENGAL.

of any sort in this tract, and amongst both Hindus and Musalmans the proceeds of a good harvest are usually spent at once on some domestic ceremony. But the fertility of the land covers all such vagaries; labour is imported and food exported, a fact which speaks for itself.

Northern Bengal.

Northern Bengal, apart from the tea industry, prospers under jute, sugar and rice, and has moreover a monopoly of growing the hemp that yields the drug well known under the name of ganja, of which over half a million pounds are sent out annually. Of yore there was a considerable production of silk, and though this is still in existence it cannot be said to be in a flourishing state. There is a good deal of waste land in the sub-Himalayan tract, and the prevalence of fever, which has been already mentioned, seems to have thinned out the population from the more undesirable lands. The assessment presses very lightly on the soil, and the tenants are well protected under the Act of 1885. They are not quite so prosperous as their compeers in the east, and are said to be more in the power of local money-lenders, but owing to the facility with which the raiat can now get his produce to market, he is far better off in this respect than he was 15 or 20 years ago.

Central Bengal.

The Central portion of Bengal, though near the capital, is by no means as prosperous as the two divisions before mentioned. It has but little waste land in a condition for cultivation, and a good deal of the northern portion is apt to be damaged by flood water from the larger channels of the delta. Of the non-food crops jute has suffered of late the same changes as in the neighbouring divisions, whilst indigo is in a far worse condition. There has been, however, a noteworthy rise in the area put under oil-seeds and other second crops, by which the tenants profit greatly, as they are exempted from the clutches of the money-lender by custom of the district. It is about this division that indebtedness begins to be markedly prevalent amongst the peasantry, but it is stated that the state is not a burdensome one, owing to the regularity of the rainfall, which enables the creditor to recover a fair proportion of his loan every year. The cause of applications for aid of this sort is said to be almost universally the cost of domestic ceremonies, and, though very rarely, several bad seasons in succession. Even the sub-tenants who pay very high rents in this tract are said to live well, and to be able to pass through a bad season or two without curtailing in any way their ordinary expenses. In the

Western Bengal.

neighbouring division, the Western, as well as here, the market for vegetables and other subsidiary produce is brisk, owing to the proximity of Calcutta and its suburbs. In Burdwan, however, the area of waste land which is altogether unfit for cultivation is larger as the hill tracts are approached; but there are large stretches of what is now swamp which will probably succumb to the efforts now under consideration for draining them. The rents run high in this tract owing to the practice already mentioned of sub-letting over and over again, but in spite of this and a very high standard of expenditure on domestic ceremonial, the money-lender is remarkably uninfluential, and in fact, were it not for the middle classes, he would hardly be able to make a living at all.

Orissa.

Orissa, like Eastern Bengal, produces in an ordinary year far more rice than is necessary for the local population, much therefore is exported to Ceylon and Mauritius. There have been troubles, as mentioned above, between landlord and tenant, owing mainly it is said to the ignorance and rapacity of the former, but on the other hand the Uriya peasant is favoured by soil and climate. The division is far less fever-stricken than most of the rest of Bengal, and except for occasional local outbreaks of smallpox and the cholera, which so often accompanies large gatherings of worshippers at the shrine of Jaganath, is a decidedly healthy country. The standard of living is high; the houses are solidly built, and cattle more numerous than in Bengal proper. At the same time the money-lender is a feature in the domestic economy of every village, and it is said that nearly two-thirds of the well-to-do classes are in debt to him, though full payment is seldom, if ever, pressed for. Nevertheless, the class whose prosperity is most outwardly manifested in clothing and residence is that of the village money-lender. It is said that all the increase of wealth that has accompanied the development of this division since the great famine of 1866 has been devoted, in spite of extension of education, commerce, and communications, to the performance of domestic and religious ceremonies, to which the Uriya is intensely prone.

In

In Chutia Nagpur the population is of a different type to that engaged on the land of the rest of Bengal. The greater part consists of more or less reclaimed forest tribes. Their wants are simple, their assessment light, and their diet unfettered by prejudice. Either from the relatively better climate of the upland portion of the division, or from the acclimatisation of these tribes to the malarious conditions of the forests, the general health of the population is better than that of the residents of the plains: a fact which, as shown in the connection with the subject of migration to Assam, is not without its market value. In the Manbhum and Singhbhum districts the standard of living is high as compared with that which prevails amongst the peasants of the alluvial tracts, to whom the inhabitants of these districts are assimilating themselves in caste and custom. In the wilder parts of Chutia Nagpur, where the soil is lighter, but the rainfall equally regular, the diet of the tenantry is more varied, and the produce of their field is supplemented by the consumption of pig, goat, fowl, and a good deal of wild fruit. In these parts, too, the cost of domestic ceremonies is far less than where the tribe has succumbed to the influence of the caste system of the orthodox, so that not only is the standard of food higher, but the money-lender is less powerful, though never entirely in the background. The proportion of cattle, again, seen on the estates of the cultivators throughout this division is above the average, owing, no doubt, to the abundance of light pasturage to be got amongst the hills. It has been mentioned that the relations between tenants and those from whom they hold are not altogether satisfactory, and it is said that from this cause the general progress of the division is retarded. Indebtedness is widely spread, but, as in most other parts of the country, its measure is the credit, not the needs, of the borrower, and the lower the position or estate the less the debt incurred. The smaller tenants, too, and the tribes who hold land on very lax terms, have no scruple in taking to general labour for a few months of every year, if necessary, or even emigrating to Assam, where they often settle altogether. On the whole, though about half the cultivators are said to be in debt, none of them are absolutely insolvent, and the amount of the obligation presses lightly on them. The main causes are, first, the high rents extorted by their landlords, and, next, the endeavour amongst the more civilised tribes to win for themselves a higher social position by extravagance in ceremonial expenditure.

BENGAL. Chutia Nagpur.

In considering the circumstances of the Bihar division, the small tract called the Santhal Pargannahs must be excluded, because it differs from the rest of the tract in population, climate, and geographical conditions, and is merely included in the returns as a part of Bihar for administrative convenience. The inhabitants are of two classes. First, the Santhal, a tribe now entirely reclaimed from wild life, who furnish, when they go abroad, the best labourers to be got for extensive and troublesome earthwork, and at home are noted for frugality and industry. Their land is not under the permanent settlement, so there is no rack-renting, and their estates are held direct from the State, without intermediating agents, the source of so much friction in other parts of the country. The second class is composed of the Pahadia, or hill tribe, who are gradually being extruded from their lower settlements by the pressure of the Santhal agriculturist. This class lives a good deal on the produce of the chase and fitful cultivation. Drink is a great cause of debt and trouble of other kinds, and with the small area to which the tribe is now restricted their means of livelihood are but scanty, and the chances of their reclamation more remote than that of their extinction. They are, it must be mentioned, the remnant of a race now driven southwards, so that there is no sympathy between them and the stronger Santhal.

Santhal Pargannahs.

In Bihar the conditions are far less favourable to the agricultural classes than in Bengal, Orissa, or Chutia Nagpur. The same tendency that has been noticed above, of the prosperity of the masses to decrease from east to west, is here very marked. A line may be drawn through the districts of Bankura and Midnapur in western Bengal, to the west of which the smaller tenant begins to feel severely the effects of a scanty harvest. In Bihar, too, the eastern districts are, on the whole, more prosperous than the rest. It is not that the soil of Bihar is less fertile, or that the climate is less favourable, or the inhabitants less industrious than in the delta. On the contrary, the greater part of this section of the Gangetic basin is most productive, the climate is notoriously healthy, the industry

BIHAR.

BENGAL.

industry of the Bihari peasant is proverbial, communications are good and well distributed, and instead of the growth of a single staple grain, the conditions admit of the cultivation of such remunerative crops as wheat, millets and poppy. One of the causes of the undoubted inferiority in the condition of the Bihar peasant is the liability of the division to short rainfall. A more important one is the tendency to multiplication in the population. The mean density has been shown to be the highest in the province. In north Bihar it is 673 and in the south 520 per mile. It is one of the peculiarities of this tract that marriage takes place at an abnormally early age, not only amongst girls, but amongst boys also, so that the two sexes go down the hill of life together to a far greater extent than in the rest of Bengal. The result in past generations was doubtless an exceptionally high rate of increase, which the Census proves to be now indicating the usual symptoms of decline, due to the repletion of the sustaining area. Another result is the number of young couples that have to be provided for on starting in life, which, amongst a population wholly agricultural, means the minute subdivision of holdings. The pressure of population, again, has led to competition for land to such a degree that the landlord can rack-rent up to the utmost the soil will bear, so that the advantage that would otherwise accrue to the tenant from a superabundance of field labour is absorbed by the rent. Subletting is carried on as far as possible, till a considerable substratum of pauper tenants is reached. It is estimated that under the present agricultural conditions of Bihar about 2½ acres will support a family adequately, if the land be of the ordinary quality and well, if it be capable of producing vegetables, tobacco, poppy or sugar-cane. But in some of the Bihar districts subdivision goes lower than this, and the tenant has to eke out his income by agricultural labour. In many cases this is advantageous to him, and his earnings exceed those of most of his companions, who, from caste prejudice or the want of energy to adapt themselves to new situations, prefer to curtail consumption at home for a few months, pending the ripening of the next harvest. It is hoped that the Tenancy Act and other measures for the establishment of the relations between landlord and tenant on a definite and well-understood basis, will bring some relief to this class, but with the tendency to breed up to the full capacity of the land to bear them, it is only to be expected that the proprietor of land will take full advantage of the position to encroach upon the margin left by the selling price over the cost of production, and it is estimated locally that about 40 per cent. of the population of two or three of the districts where the competition is most keen, cannot be reached by any action on the part of the State in connection with the land. So far as the State demand is concerned, the average incidence is but a little over a quarter of a rupee per acre in the eastern tract, and a trifle under three-quarters in the western or Patna division. The money-lender is very powerful in the eastern districts, where the tenants are said to be mostly in debt, some for cash advanced, some for grain, others for both. Indebtedness is reported to be equally prevalent amongst the landholding classes in south and west Bihar, and in the latter the creditor class, whether dealing in cash or grain, is stated to form the bulk of the purchasers of landed property. Including the agricultural labourer, who, as stated above, is to a great extent undistinguishable from the smaller landholder or tenant, a rough estimate gives about one-fifth of the population as annually compelled to live on curtailed rations for several months. In some districts this proportion is exceeded, in others not reached, but the point is obviously one on which conjecture only can be made.

The railway and dock works, with other public undertakings, have of late years given temporary employment to numbers of the classes which are willing to leave home for a season or two, but a more lasting demand for general labour is found in the coal mines, iron works, jute mills, and other industries that have sprung up within the present generation. There is now a more or less regular stream of labour flowing from Bihar to Calcutta, and during harvest time to eastern Bengal also. The rate of wages in these parts of Bengal are considerably more than double, or even thrice, what is to be got on the fields in the native district of the migrants. The addiction of the Chutia Nagpur labourer to seek his living abroad has been mentioned already. Even the field hand of Central Bengal has taken to Calcutta, though he declines to cross the sea. Except, therefore, amongst the lower classes of Bihar, there is no lack of a good day's wage for a good day's work, and the condition of the labourer, in respect to food, household vessels, and ornaments for his womenkind, indicate

indicate no cause for apprehension. Going a step higher, the weaver has no doubt suffered from European competition, and in eastern Bengal, the home of the former great muslin industry, he is said to have taken largely to agriculture either in person or through tenants. It does not appear that the practice mentioned in connection with the Panjab and Upper India generally of working up foreign yarn on the hand-loom has got much of a footing in Bengal, though in the districts round Calcutta the weaver caste has sought employment in the mills. The potter, again, in tracts where the climate and customs of the people are adverse to brick-built houses, has suffered from the substitution of metal for earthenware in household vessels, but it is less of a change for him to take to field work than for the higher orders of handicraftsmen, though an additional burden is thrown on the land by the transfer. As regards the other artisans, the carpenter, blacksmith, goldsmith, and the like, it is generally allowed that a full share of the prosperity of the larger landowner has fallen to them. Above the artisan there is the professional class, whose condition much resembles that in other parts of India. The rise in prices of food-grain has been sorely adverse to the families that live on fixed cash remuneration, still more to those who by caste tradition have no other means of livelihood open to them. Lawyers, however, and in the richer tracts medical men, are in good case. The former advance with the progress of the non-agricultural landholders, who form his most profitable clients. The latter have gained their position in the course of the spread of experience amongst even the cultivating class of the advantages of the system of treatment taught in the European colleges over the empiricism of the Vedic and Yunâni practitioner. But the success of any members of either of these professions, indeed of most professions, too often connotes merely an increased burden thrown on him of supporting those of his family who have been less fortunate in life. There is, again, the not unimportant class of landowners whose estates have been diminished by partition until their share ceases to suffice for their most moderate requirements, and whose caste forbids them to enter into competition in other occupations with others conventionally their inferiors. With such as these times are undoubtedly hard. But it must be remembered that these constitute but a small fraction of the population, and that what is to them a loss is the chief cause of the prosperity to the masses. BENGAL.

Summarising the results of the investigation of which the above is the review, it may be held that, in Bengal proper, and in Orissa and Chutia Nagpur, there has been a general rise in the standard of living which the present circumstances are sufficient to maintain. Prosperity rises as the eastern tracts are approached, and the density of the population is such that where it has been lessened by the growing unhealthiness of the country round the condition of the survivors is still above the average of their class elsewhere. In Bihar, however, prosperity reaches only as far as the middle classes of agriculturists, where it is decidedly steady and widespread, but, owing to the competition for land and work, the class dependent partly on wages is in a depressed condition. This state is attributable to early and universal marriage, aided by a relatively healthy climate, so that it cannot be reached by any modification of the system of land-tenure, or more than temporarily by emigration, unless conducted continuously and on a large scale. The root of the evil lies in social conviction, and it is impossible, therefore, to stop its growth from outside.

## ASSAM.

In treating of Assam it is necessary to distinguish between the valleys and the hill tracts, owing to the difference in population as well as to that in physical circumstances. As regards the former, the keynote of the subject now under consideration is struck by the late Commissioner of the Assam Valley, an officer of nearly 20 years' experience in the Province, who writes: "What we want in this division is increased population, and competition for the means of existence." He points out that a living is here so easily earned that the people have little ambition and develope no new wants. The tea-gardens, that have added so much to the prosperity of the country, have to be manned by labour imported from hundreds of miles away, because the local population is too well off to accept ASSAM.

Assam.

accept work on them, nor will it work on roads or other public undertakings which are thus carried out by men from Bihar and Oudh. The population is more markedly agricultural than in any other part of India; there are no large towns, and the whole urban population is in a ratio of only 1·8 per cent., and increases at a considerably slower rate than the rural. That the latter does not more rapidly expand seems due, first, to the dislike of the Assamese to exert himself more than will suffice to provide for his annual wants, and, again, so far as the decade under review is concerned, to the mortality caused by the peculiar local disease which broke out a few years back, and which, under the name of the "black sickness" (*anchylostomiasis*), has carried off over 100,000 persons in the Brahmaputra Valley. In the Surma Valley the conditions of life are somewhat harder, owing to the denser population and the necessity of more exertion. Still, even here, the rate of growth is the same as that of the neighbouring tracts in Bengal, which, as mentioned earlier in this chapter, is the highest in that Province. The vicissitudes of agriculture are here, it is true, rather more than in the sister valley, owing to the occasionally heavy flooding of the land, but the only famine on record, it may be mentioned, occurred 110 years ago.

Cultivation

The total area of the two valleys is about 18,400,000 acres, of which 6,967,516 were assessed as cultivable in 1891-92. In 1881-82 the corresponding area was 6,414,548. In 1884-85 the area cropped was 1,428,831 acres, and by far the greater portion of the 1,804,761 acres cultivated in 1891–92 is under rice. A little mustard is grown for export in the northern valley, and jute is cultivated to some extent in the southern. The marginal table shows the growth of the tea industry in the decade. This is chiefly in the hands of foreigners, but the development of trade has been largely due to it, so to a great extent the natives of the Province share in the benefits. It is a curious comment on the local enterprise that whilst the Surma Valley, with a density of 333 per mile, exports a considerable quantity of rice every year, the Assam Valley, equally fertile, with a density of no more than 117, does not grow enough to supply the immigrant labour on the tea gardens, and has to import for the purpose.

AREA UNDER TEA.

| Valley. | 1881. | 1891. |
|---|---|---|
| | Acres. | Acres. |
| Surma - - - | 64,040 | 105,221 |
| Brahmaputra - | 94,135 | 136,572 |
| Total - - - | 158,175 | 241,793 |

Assessment.

The land revenue, including the insignificant sum contributed by the hill tracts, amounted in 1891–92 to Rx. 421,407. The incidence per acre was Rupees 0.55 in 1881, and Rupees 0.62 ten years later. In the Surma Valley, where most of the land is under the permanent settlement, the incidence for the two years was only Rs. 0.255 and Rs. 0.307 respectively, against Rs. 0.844 and Rs. 0·90 in Assam proper. The local cess only raises the above by the insignificant sum shown in the margin, so that the whole demand in no case reaches one rupee per acre. Taking the incidence of the assessment per head of population, it is found to vary from Rs. 0.21 in the Goalpara District to Rs. 2.01 in Sibsagar.

| Valley. | 1881-82. | 1891-92. |
|---|---|---|
| | Rx. | Rx. |
| Surma - - - | 83,907 | 98,845 |
| Brahmaputra - | 268,360 | 320,384 |

| Valley. | 1881 | 1891. |
|---|---|---|
| | Rupees. | Rupees. |
| Surma - - - | 0.03 | 0.01 |
| Brahmaputra - | 0.08 | 0.08 |

Tenancy.

In the permanently settled tracts the proprietors are generally themselves cultivators, and the estates, which only cover about four per cent. of the cultivated area, are small. Contrary to the experience of the North-West Provinces, Bihar and Oudh, here the land calls for tenants, not tenants for land, so the proprietor is not in a position to exact high rent; if he does, the tenant moves to waste land almost next door. It follows, too, that the latter takes little trouble to establish a right of occupancy against his landlord, and nearly 80 per cent. of the tenants hold nominally at will. In the Assam Valley the dislike of the trouble of attending an office to take out leases or to pay rent is said to have led a number of proprietary occupants to enrol themselves as the under-tenants of others, as, in practice, they find the position equally secure and less irksome. The rent demanded seldom rises far above the State assessment, except in specially desirable localities, or where the land is tilled on some system of

sharing the produce with the superior holder. The crop experiments carried on in the Province indicate an average yield of 25 bushels of unhusked rice per acre, out of which a large margin remains for division. It is satisfactory that in both valleys the relations between landlord and tenant have been hitherto harmonious, as the former is almost invariably resident on his estate, and often himself of the agricultural class. Assam.

The standard of living is relatively speaking high, since in addition to rice and vegetables a good deal of fish is consumed. It is noted, too, that in most households metal vessels have been substituted for earthern or bamboo-ware; that most cultivators have in their houses the silk clothes for marriages &c., which some years ago were only worn by the upper classes; that silver ornaments are now seen on even field labourers, whilst the tenant-class has generally advanced from that metal to gold. The opening up of the country by roads, of which about 5,800 miles have been constructed, the commencement of railway communication, still more, the great improvement of the steamer service on the Surma and Bráhmapútra, have lowered the price of imported goods, and trade has risen in value from Rx. 5,260,000 in 1881, to Rx. 7,540,000 in 1891. The price of food-grain has risen owing, it is said, to the growth of the tea garden immigration, by about 40 per cent., whilst salt, which is imported, has fallen in price by some 16 per cent., so as to drive out the use, even amongst the poorest classes, of the vegetable ash which used to be consumed in its place. Standard of life. Prices.

The Province, with all its advantages, is not entirely free from indebtedness amongst the cultivating classes, especially in Sylhet. The main causes are first, want of foresight in making the surplus income of a good year available for subsequent emergencies, and, secondly, the growth of marriage expenses, with the rise in the standard of life, especially amongst the middle and lower classes, who have chiefly benefited by the new conditions. In the Assam Valley, however, indebtedness is, on the whole, either unknown or only temporary, and the census shows the money-lender to be a rare feature in village life. In the Surma Valley a few bad harvests in succession brought him into prominence, and a large proportion of the tenantry is now alleged to be on his books. The suspension of the collection of the State assessment for six months was sanctioned last year as a partial remedy, but that concession seems only to have added to the difficulty of its ultimate realisation. It will be noted, too, that the incidence of this assessment is by far the lightest in the Province, amounting to less than sixpence per acre, against double that rate in the sister valley. It cannot, therefore, be considered an important factor in the present circumstances, nor is the rental much heavier, for the reason already given, of the competition for tenants. Generally speaking, then, the Surma Valley peasantry are in easy circumstances, though with a tendency to fall in inferior years, owing to the absence of a reserve from years of plenty. A few months' work on one of the neighbouring tea-gardens, where acclimatised labour is at a premium, re-establishes the balance, but it it is a course repugnant to the Sylhet tenant, who prefers light work, even on curtailed diet if necessary, to a full task under trained supervision. Agricultural indebtedness.

The inhabitants of the hill-tracts of Assam are mostly agricultural, after their various inclinations. The general system of cultivation is by the wasteful method of burning the forest for ash manure, taking a crop or two off the patch thus cleared, and then moving on to fresh fields of destruction. The Khási tribes, however, have taken to vegetable-growing, and engage in trade and porterage to a considerable extent. The Nágas, again, are expert agriculturists, and have adopted in some of their territory an elaborate system of terrace irrigation that secures their crop against drought. The Gáro tribe is reputed to be the lowest in circumstances. Their cultivation is rudimentary, and they are averse from labour. Now that their hills have been opened out by good roads, and they have become aware of the value of the produce of their forests, there has sprung up a considerable trade in the latter, by which the natives have duly profited. The Khási and Nága tribes are in good circumstances and are not restricted to their crops for subsistence, as they are great beef-eaters whenever they can procure a cow or wild buffalo. There is this difference between them, that the Khási take up labour, whilst the Nágas refuse it. Both spend a good deal on food and ornaments above the usual standard of the inhabitants of the valleys, and all three tribes utilise a good deal of their rice in the manufacture of a species of beer, which is their favourite drink. The Hill tribes.

Assam.
The non-agricultural classes.

In the valleys there is little room for the professional class, the members of which, if natives of Assam, are often connected directly or indirectly, with the land. The simple life of the bulk of the peasantry, again, dispenses with the help of the artisan, who, in former days, was entertained solely for the service of the local court. The caste system being very lax, most of those who had learnt a handicraft fell back on agriculture as soon as the court patronage, or rather, the compulsory service exacted by the Rája, was swept away, and there is now but a small number of artisans who exercise no other trade. The labour market, as shown above, is stocked from other parts of India, and with the growth of the demand, the remuneration has risen. One of the native gentlemen who was consulted in the course of the present inquiry gives his opinion that the better class of labourer is the coming man in Assam, as he has acquired the habit of work, and appreciates the results of energy and enterprise; he is therefore passing the lower class of tenant in the race of life, and invading the higher circles, from which, apparently, it is difficult to repel him. It is stated that a man of this class can earn at least a quarter of a rupee a day on road work, and often four times that sum; whilst half a rupee is a not unusual wage for a journey by a porter. This is far above the rate current in other parts of India.

In conclusion, the above description seems to establish the fact that beyond a temporary depression from time to time amongst the tenantry of the southern part of the Province, which can easily be counteracted by resort to other occupations well within reach, as is done in Bihár, the population of Assam is above the Indian average in material prosperity, but has not yet awakened to the advantages of its position.

## BURMA.

Burma.

The Upper and the Lower Sections of this Province differ considerably in climate as well as in history, so it is as well to deal with each separately. Lower Burma is in much the same fortunate position as Assam in respect to rainfall and fertility, whilst its population is still more sparse. Upper Burma, on the other hand, is subject to variations in season which sometimes, as in 1891–92, extend to a wide-spread failure of rain, causing scarcity which nearly amounts to famine. In the case of Lower Burma, again, there is the census experience of twenty years as a guide in estimating the circumstances of the population; but in the other division there is little to judge by but the events of the last six years, with such indications as may be gleaned from trade returns. In both sections of the Province rice is the staple food, but in the dryer zones of Upper Burma wheat, millets, maize, and pulse are grown, and in some tracts even cotton. In the Lower division, sugar-cane, tobacco, and vegetables share the small area which is not taken up by rice. The urban population is proportionately rather high, being 12·3 in Lower, and 12·6 per cent. in Upper Burma, but this is due to the sparsity of population in the rural tracts, and the attractions of Rangoon, Maulmain, and Mandalay, for there are few other towns of any considerable size. In Lower Burma, again, where the increase in the population has been abnormal, it is returned at 18 per cent. in the towns, to which Rangoon contributes most, and over 25 per cent. in the country. Immigration, as has been already shown, is active, both from Madras and Bengal, and from the former it is assuming a steady, if not a permanent form. But the detailed returns indicate that most of the growth is due to natural expansion over a highly favoured and thinly-populated country.

Cultivation.

In this section of the Province, cultivation has advanced as shown in the margin, the mean rate of increase being 160,000 acres per annum, with a tendency to rise during the last few years. In 1888–89 the addition amounted to 318,000 acres, next year to 296,000, and in the last year of the decade, to 300,500. Rice, which in 1881 covered 87 per cent. of the cultivated area, expanded to 90 per cent. ten years later. In Upper Burma out of a total cultivated area in 1890-91 of 4,119,000 acres, 1,350,600 were under rice, and 142,400 under cotton.* Two years

| Lower Burma. | Total Cultivated. | Under Rice. |
|---|---|---|
| | Acres. | Acres. |
| 1881–82 | 3,552,827 | 3,004,092 |
| 1891–92 | 5,143,548 | 4,648,921 |

* In 1891-92 the deficient rainfall reduced these areas to 2,648,400, 1,013,000, and 110,393 acres respectively.

years previously, when the rainfall was more favourable, the rice area was 1,606,000 acres. In Lower Burma, as just observed, the season has never fallen below a high average quality, but Upper Burma has suffered from drought for the last two years in its central districts, and in 1891–92 relief works were opened, in the shape of irrigation works and roads, on which nearly 23,000 people were engaged for some months. BURMA.

Lower Burma not only provides rice enough for its own population at its present rapid rate of growth and exports a considerable quantity to the Upper part of the Province, but owes a considerable part of its agricultural prosperity to the surplus available for foreign consumption. The following estimate, based on the population of 1891, is instructive: Food supply.

| | Tons. |
|---|---|
| 1. Estimated out-turn in "cargo" rice | 1,940,000 |
| 2. Food required for home consumption | 931,725 |
| 3. Seed | 77,828 |
| 4. Supply for cattle and elephants, about | 40,000 |
| Total consumption | 1,049,553 |
| Surplus | 890,447 |

The exports, including those those to Upper Burma, have been as shown marginally during the decade. It is clear that if there chance to be a short crop in Lower Burma, the easy remedy is a curtailment of exports. In the case of Upper Burma, the abnormal quantities taken between 1886 and 1888 are due both to the military occupation and to the disturbance of normal cultivation, owing to the dacoities. It is anticipated that what with the peaceful development of this part of the Province and the extension of the irrigation projects, new and old, which is now being carried out as fast as State funds are available, there will soon be no reason to rely upon Lower Burma for its supply of anything beyond luxuries. It has been found that only two of the 17 districts are not by their position, or cannot be by irrigation, secured against failure of crops. In Lower Burma, besides an abundant supply of rice, fruit, and vegetables, the population reap the advantage of a very large harvest of the sea, and fish, fresh, salted, or pickled, enters considerably into their diet. The standard of life is high, as both by inclination and religious precept, the Burman is averse from saving, and what is not spent on food and luxuries, such as European delicacies, perfumery, mirrors, and railway or steamer travelling, is devoted to the acquisition of religious merit. It is thus estimated that a Burmese family spends annually about six times the amount spent in an Indian household of corresponding rank.

| Year. | Total. | To Upper Burma. |
|---|---|---|
| | Tons. | Tons. |
| 1881–82 | 957,206 | 11,087 |
| 1882–83 | 1,109,147 | 42,618 |
| 1883–84 | 897,489 | 46,374 |
| 1884–85 | 770,741 | 91,226 |
| 1885–86 | 1,049,747 | 87,981 |
| 1886–87 | 1,015,103 | 97,724 |
| 1887–88 | 1,076,513 | 177,504 |
| 1888–89 | 849,388 | 136,813 |
| 1889–90 | 966,681 | 56,889 |
| 1890–91 | 1,291,269 | 59,015 |
| 1891–92 | 1,255,000 | 97,918 |

During the last ten years much has been done in the way of opening out the tracts of Lower Burma that are beyond reach of water-carriage. Two lines of railway are open, and an extension is in rapid progress. Against 227 miles of road in 1881 there are now 922. In Upper Burma the line to Mandalay was opened early in 1889, there is a highly efficient steamer service on the Irawadi, and 214 miles of bridged and metalled road were completed by the beginning of 1892. Communications.

The system of assessment in Lower Burma differs considerably from that in the other Division. In addition to that on land, to which a 10 per cent. rate for local improvements is added, there is a capitation rate, which, in an agricultural community like Burma is equivalent to a charge on land, for which indeed it is in many cases substituted. The marginal table gives the amounts and incidence for the initial and final years of the period under review. It may be added that the whole demand is punctually paid, and the arrears in 1892 amounted to no more than Rx. 1,341. In Upper Burma, the household tax, or *thatha méda*, is substituted for the capitation tax and the assessment of land. It is collected by the village headmen, on the joint responsibility of the whole community under him. As the rate is fixed by usage, and varies with the wealth of each household, the rich are somewhat favoured; and Assessments.

| Year. | Land Assessment. | Local Rate. | Capitation Assessment. | Total Incidence. |
|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rs. |
| 1881–82 | 630,580 | 63,058 | 295,670 | ·265 |
| 1891–92 | 922,654 | 92,265 | 371,490 | ·298 |

Burma.

as, again, State officials are exempt, and many have become large landed proprietors, everything points to the justice of substituting a land settlement for the present system. The necessary survey has, therefore, been taken in hand. In certain cases, known as State lands, an assessment was levied under the late *régime*, but it has been found that its rates were considerably above those fixed on corresponding land in Lower Burma, so this constitutes another reason for revising the system. The marginal table shows the collections under the three main heads of revenue for the last four years. The incidence in 1891–92 amounted to about Rs. 219 per head.

| Year. | Assessment of State Land. | Household Tax (Thathameda). | Fisheries, Mines, &c. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| 1888–89 | 60,686 | 329,889 | 55,945 |
| 1889–90 | 64,346 | 378,464 | 135,378 |
| 1890–91 | 65,200 | 434,092 | 132,562 |
| 1891–92 | 87,210 | 396,484 | 184,900 |

Tenure.

Throughout Burma the cultivator is usually the proprietor of the land he tills. In the Upper Division, however, there is a class of State tenant on the special class of land mentioned in the last paragraph. In Lower Burma, especially near the towns, the number of tenants is said to be increasing, owing to a cause that betokens a tendency in anything but a satisfactory direction. The proprietary right is here transferable, and the extravagance of the peasantry in those tracts, where unusual temptations to luxuries are found, leads the proprietor to sell his land to his creditor, and cultivate it as a tenant-at-will. Thus there is a steady rise, though it cannot be measured by statistics, in the area held by middlemen, who, finding that their holdings, assessed at about a rupee an acre, can be let at six times that amount, have taken largely to acquiring this class of property by way of speculation. In less desirable situations there are fewer transfers, especially as the abundance of fertile waste enables an embarrassed proprietor to sell his estate in one place and acquire another nearly as good a few miles off. In any case, in spite of the absence of security of tenure and any limitation of the rental where land is held from the middleman, the fertility of the soil enables the tenant to pay any reasonable rent without difficulty, and the fact that both debtor and creditor belong to the same race and rank in society deprives the transaction of one of the features most seriously and disagreeably prevalent in such circumstances in other parts of India. The State tenants in Upper Burma are protected by Regulation; other tenants are in the same position, at present, as those in the other division of the Province, that is, at the mercy of the landlord as regards tenure and rental.

Prices.

As regards prices, the three most important articles in Burmese economy are rice, salt, and fish. The first-named has fluctuated more than usual in the last two or three years owing, it may seem strange to state, to the improvement of communications. In other parts of India progress in this respect has been shown to have had a steadying effect on prices, mainly because there is certain to be a deficient harvest in some part of the country or other, which the surplus of another is now available to counteract. But in Burma it has hitherto been the custom for the producer to set aside all the grain required for his own wants before letting any go for export. Lately, however, he has taken to selling the whole crop, and buying what he needs for household consumption in the market. Thus, if the foreign demand be brisk, the local dealers send down as much as possible for export, and before the next harvest is available their stock runs low and prices necessarily rise. In 1891, for instance, there was as near a scarcity of rice in Lower Burma as possible, and local prices attained the maximum hitherto known. Unhusked rice, which averaged Rx. 3·5 per ton in 1881, rose to Rx. 7·5, and export prices, too, which are more subject to fluctuation, have shown a decided upward tendency in the last four years. The rise in the price of salt from Rupees 1·427 in 1881–82 per local unit of 80 lbs., to Rupees 2·687 in 1891–92, followed the equalisation of the State duty on this article, for the charge in Burma had been but Rupees 0·187 before 1888, and from that date has been fixed at one rupee per unit. The impetus thus given to the importation of salt fish, both dried and moist, has attracted the attention of the Government of India, and measures have been taken since the close of the period under review to indirectly regulate this traffic

| Year. | Price of Rice per Local Unit (80 lbs.) | |
|---|---|---|
| | Rangoon. | Lower Burma. |
| | Rs. | Rs. |
| 1881–82 | 2·000 | 3·323 |
| 1882–83 | 2·125 | 3·573 |
| 1883–84 | 2·470 | 3·167 |
| 1884–85 | 4·797 | 3·000 |
| 1885–86 | 3·220 | 3·281 |
| 1886–87 | 3·500 | 2·766 |
| 1887–88 | 3·197 | 3·344 |
| 1888–89 | 3·197 | 3·125 |
| 1889–90 | 3·125 | 3·266 |
| 1890–91 | 3·250 | 3·234 |
| 1891–92 | 4·500 | 4·041 |

traffic by alterations in the customs' tariff. That the native supply of this article of diet has not languished is shown by the increase in the fishery revenue from Rx. 140,000 in 1881–82 to Rx. 165,000 in 1891–92. The imports, however, of *ngapi* (pickled fish) have risen from 14 cwt. in 1887–88 to 13,738 cwt. in the last year of the decade, the price of fish continuing much on a level throughout that period. BURMA.

The private trade of Burma, including treasure, rose from Rx. 16,645,740 to Rx. 25,082,260 in 1891–92. Taking merchandise only, the figures are Rx. 14,442,034 and Rx. 23,172,812. Cotton piece-goods show a very large increase, to which both Manchester and Bombay contribute, as there is little home-weaving done in this Province. The rest of the growth is widely distributed over the ordinary articles of use and consumption. The inland trade with China and Siam has only recently been under registration, but from the figures marginally given, it is apparently reviving after a period of depression, due to the unsettled state of the north and north-eastern frontier. Trade.

| Year. | Amount. |
|---|---|
| | Rx. |
| 1890–91 | 1,114,084 |
| 1891–92 | 1,161,377 |

In spite of its natural advantages, Burma has a not inconsiderable amount of indebtedness amongst the landholding classes, though there is probably none of the "hopeless insolvency" spoken of in connection with some sections of the corresponding community in India. But it has this feature in common with the rest of the country, that the richer the tract the greater the indebtedness of the agriculturist, which shows that here, too, the condition in question indicates credit rather than distress. The transition from landlord to tenant, and *vice versâ*, is rapid and easy in Burma. Gambling and improvidence speedily reduce a proprietor to a tenant-at-will on his former estate, but if a heavy rent is demanded, he simply migrates a few miles and starts afresh. On the other hand, new settlers from Upper Burma and young men setting up an establishment for themselves, usually begin as tenants, and as soon as they have "felt their feet" take land on their own account. The comparative unity of race and interests of the debtor and creditor class has been mentioned above, and though, in the present stage of the development of Burma, this may instigate the process of transfer of property, the influx of Indian immigrants, both labouring and commercial, and the rapid increase of the Native population, are factors which make the results of the recklessness of the Burmese character, when, combined with the alienability of his land, matters engaging the careful attention of the local Administration. Agricultural indebtedness.

There is little extension of industry in Burma, beyond what may be termed indigenous crafts, and the unskilled labour required in preparation of the exported produce. Weaving is not a separate profession of any importance, as it is carried on chiefly by the women of the household for home purposes. Carpentering and gold and silver work flourish very well, both on account of local demand, and the interest taken of late years by foreigners in Burmese handicrafts. The rice-pounding and timber trades attract most of the labour in the seaports, whilst in Upper Burma the petroleum industry is well established, and coal, ruby, and jade are engaging attention. The irrigation, road, and railway works have afforded means of subsistence to numbers in this Division since its annexation, and one of the chief features in these operations is the large number of women who attend them, both as workers and contractors for earthwork, &c. The wages of these classes of labour are, compared to the rates that prevail in India, very high, and have apparently risen from Rupees 56 to Rs. 66 a month in the 10 years, which is proportionately more than prices have moved upwards. In the agricultural community the field labourer is well paid, as he is described as rather an "embryo landlord" than a hereditary hind or agrestic serf, like his compeer in India. The non-agricultural population.

In conclusion, there is no class in Burma that is not well clothed and fully fed, and for many years hence the waste arable land exceeds the wants of the population at its present rate of growth. The only question said to require watching is the transfer of the land from agriculturist to traders, especially if the latter be foreigners.

## THE CENTRAL PROVINCES.

Central Provinces.

The administrative unit, which is now known by the above name, may be called the connecting link between the Gangetic basin and the Deccan plateau. The upper portion runs well into the Bundelkhand tracts of Central India and the North-West Provinces, the eastern adjoins Orissa and Chutia Nagpur, partaking of the better features of both, whilst the western, or Maratha, section of the Province resembles, in soil and general character, the North Deccan, or lower Tapti valley. Considered from another point of view, the Central Provinces may be divided into the rice-growing, the black-soil, and the hill tracts. The first, and richest, lies to the east; the second, to the north and west; and the hills form a central watershed. There are but two large towns, and the urban element in the population amounts to no more than 6·8 per cent. The agricultural and quasi-agricultural proportion is higher than usual, owing, in some degree, to the number of cattle and sheep breeders, and also of village weavers of the lower classes, who belong to the ranks of the menials of the community. The density of the population, numerically considered, is by no means great, as it varies from 197 per mile in Nagpur, where the town influence is felt, to 65 in the Chanda district, in the south-west. But it is necessary to take into account 20,000 square miles under State forests, and the large area incapable of producing more than grass or scrub. The cultivated area supports about 395 persons per mile, or about 1½ acres per head of rural population. It is worthy of note that in the districts where rice is the staple crop, the density rises to 508, whilst in the black-soil and allied tracts it falls to 339. It is also noticeable that the growth of the population in the last 10 years has been generally proportionate, except in cases where the former census was admittedly inaccurate, to the proportion of the arable land on which rice is grown. In one or two districts the number of persons per acre of arable land, generally black-soil, which is unsuitable for double cropping, has risen to a point which, taken with the slow rate of increase, indicates a near approach to repletion of population. It is curious how ill this state of things accords with the assertion so often made in other parts of India, that this Province offers a good field for immigrants. No doubt, as shown by the returns of birthplace, there was in the early days of British occupation a certain amount of migration from the north, but of late years the sex-proportion amongst those not born within the Province is enough to prove that the movement is confined to intermarriage across a merely political and artificial frontier line.

| District. | Rural Population per Mile of Cultivated Land. | Percentage of Increase of Rural Population since 1881. |
|---|---|---|
| Narsinghpur - | 365 | 0·5 |
| Saugor - - | 381 | 5· |
| Damoh - - | 387 | 4· |
| Wardha - - | 258 | 4· |
| Chanda - - | 542 | 5· |

Cultivation.

The first class of information, then, which bears upon this subject is that relating to cultivation. The marginal table shows the different areas dealt with at the first settlement, and in 1890-91. Counting double-cropping, a practice which has spread widely in the eastern division within a comparatively recent period, the area under crops has risen by 28 per cent. Rice-cultivation shows an increase of 18 per cent., wheat of 24, and other food grains of 14. Oil-seeds have expanded over more than double the area they were thought worthy of 25 years ago. The extent to which available land suited to the various systems of cultivation has been taken into occupation during the currency of the late settlements is indicated by the fact that in four districts just re-settled, in all of which the arable waste at the last survey was above the average in area, the increase in cultivation has been from 31 to 44 per cent. Apart from the 20,000 square miles of State forest, and nearly the same area in the large private estates, there remain about 21,000 square miles still unoccupied; but though most of it is probably cultivable, if pressure of population demands its exploitation, there is no doubt that but a comparatively small portion is equal to the really good

| Year. | Total cropped. | After-crop. | Rice. | Wheat. | Other Food Grains. |
|---|---|---|---|---|---|
| | Acres. | Acres. | Acres. | Acres. | Acres. |
| 1867-8 | 12,621,898 | 300,000 | 3,376,287 | 3,304,545 | 4,265,939 |
| 1890-1 | 13,587,566 | 1,153,739 | 3,994,821 | 4,107,473 | 4,469,565 |

good land now under tillage. This question, however, is distinct from one perhaps even more important, and that is how to induce the cultivator to make better use of what he has already in hand, for the opinion of agricultural experts is that "a very large proportion of the land is distinctly under cultivated, and quite apart from what is generally called high farming, there can be no question that the produce of the present area could be immensely increased by better and closer cultivation." CENTRAL PROVINCES.

The marginal table added to the foregoing paragraph shows that if double-cropping be taken into consideration about 80 per cent. of the cultivated area is under food-crops, of which the wheat, constituting nearly a third, is consumed locally to some extent, but chiefly grown for export. The estimate of outturn given below must be received with the same qualification as the corresponding approximation for the Panjab, namely, that it is liable to modification as crop experiments become more numerous and more accurate. The calculations refer, too, to the surveyed area only, but this supports over 9½ millions of the population. It is thus estimated that the average outturn is as shown in the margin. The amount required for home consumption, not counting cattle, food and seed reserve, is about 1,849,146 tons, leaving a balance of 585,228 tons. The average amount exported during the last four years is returned in the marginal statement, which includes some 36,000 tons not grown in the area in question. There is thus an ample supply left in the country for man, beast, and reproduction. The growth in the export trade has been accompanied by better cultivation in some tracts, and promoted by the amount of produce in others now brought to market, which in past years had to be wasted for want of means of getting it there. Food supply.

| — | Tons. |
|---|---|
| Rice | 785,714 |
| Wheat | 970,089 |
| Other Grain | 678,571 |
| Total Food-grain | 2,434,374 |

| Grain. | Tons. |
|---|---|
| Rice | 48,325 |
| Wheat | 263,056 |
| Other Grain | 48,686 |
| Total | 360,067 |

The profits of agriculture can be appreciated from the prices fetched at different periods by the chief staples of produce. The marginal table shows the variation in each case from the price during the first years of the formation of the Province as an administrative unit. For instance, rice has risen by 200 per cent. and wheat by 168, between 1858 and 1892, so that the crop of rice which fetched Rs. 100 in the first period is now worth Rs. 300, and the wheat then worth the former amount now fetches Rs. 268. The noteworthy rise in wheat, cotton, millet, and pulse in the five years 1862–67 is due to causes altogether temporary and exceptional. To indicate the inward flow of silver implied by the increased exports of agricultural produce, it has been calculated that the same quantities now sent out of the Province and valued at Rx. 3,625,000, would have been valued in 1858–62 at Rx. 1,555,000 only. The cost of production has necessarily risen, as it involves such items as seed grain, cattle food, and cash wages, though the latter, which are not by any means generally prevalent, do not rise, save near a large town, in exact accord with food-prices. But, on the whole, the value of the produce has risen in considerably higher ratio than the cost of producing it. The food-supply is more costly, estimated in cash, but the other main articles of consumption, such as cotton clothing, metal vessels and salt have got considerably cheaper. Prices.

| Period. | Rice. | Wheat. | Millet. | Pulse. |
|---|---|---|---|---|
| 1858–62 | 100 | 100 | 100 | 100 |
| 1862–68 | 155 | 207 | 288 | 228 |
| 1878–83 | 180 | 239 | 175 | 164 |
| 1888–92 | 300 | 268 | 223 | 205 |

The Province is not yet well supplied with roads, as there are but 2,806 miles open, of which about 1,600 are little better than slightly improved country tracks. The great change that has been effected in this respect is in railway communication. Ten years ago there were only 577 miles open for traffic; there are now 1,133. The most important of the additions have been the Indian Midland, in the northern, and the Bengal Nagpur, in the eastern section of the Province. Communications.

The value of the imports thus brought into the heart of the Province has risen from Rx. 1,863,166 in 1863–68, to Rx. 3,320,116, and the exports of all kinds from Rx. 1,559,922 to Rx. 4,973,045. During the first 15 years of registration Trade.

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registration the imports exceeded the exports in value, but since 1878 the trade has turned, and in the four years ending with 1891–92 the excess of exports amounted to Rx. 1,652,929. The accumulation of ornaments in the houses of all classes, even amongst the forest tribes, has been a point that has come somewhat prominently to notice during the last five years owing to the series of gang robberies in the west of the Province. The records of 555 houses attacked and plundered show that a sum averaging rupees 77 per house was obtained, and this amongst the less wealthy portion of the agricultural population. In the east the average would probably have been considerably higher.

State assessment on land.

The land revenue of the Province, including the cesses for roads, primary education, &c. was Rx. 533,520 in 1861–62; and averaged Rx. 657,377 between 1888 and 1891. Thus, the increase of 23 per cent. is considerably below that of the amount and value of the produce. The incidence of the assessment and cesses is still very light, being no higher, on an average, than Rupees ·437 per acre. Before the settlement of 1867 the average ratio of assessment and cesses in surveyed land to the gross produce was 9 per cent. It is now 3½. If the average produce per acre be assumed to have been the same then as it is now, the State share would have then been about one-tenth of it, instead of one-thirtieth, which is now taken.

Tenure, &c.

The chief classes directly interested in the land are, first, the zamindars, or holders of estates varying in area from three or four square miles up to 2,600, but with an average of 170. Much of their property is under forest, and as the price of timber has risen, most of them killed the cow that gave the milk by granting leases to speculators on ruinous terms, and spent the proceeds unproductively on pomp and ceremonial. Had not most of their estates been inalienable, they would long ago have passed into the hands of the money-lender. The assessment they pay the State averages about Rupees ·094 per acre. There is a separate assessment of 20 per cent. of the income derived from forests. More important in the economy of the province than the large estate-holders are the village proprietors, who were the lessees of the village revenue under the former *régime*. At first they were the head men of the village itself, and in the eastern part of the country they are still very largely of that stamp and class. But where the central Maratha Government was nearer at hand, the lessees were court favourites, generally Brahmans, and other non-agricultural classes. The land revenue exacted was relatively far higher than it is now, for after Orissa and Berar had been severed from the Bhonslé rule the assessment was not reduced from its previous figure, and stood at nearly the same amount as it does on the present area, which has been augmented by the three northern districts of the Búndélkhand tract. At the settlement, the Málguzár, or revenue-managers, were invested with proprietary rights in the villages for the collections of which they were responsible, though not with absolute rights as against their tenantry. The margin between the collections and State assessment was also increased, so that, considering the rise in the market value of land, the profits thus conferred on this class have been enormous. An instance to illustrate this is given by the Commissioner of Settlements, where a village on being sold in 1867 fetched Rx. 30. It was sold again in 1875 for Rx. 70, and in 1883 for Rx. 300. The results of this concession have varied according to the class to whom it was made. In the Eastern division the proprietor is simply the head man of his own community, and differs from the rest but little, in either position or way of life. In the West, where the new men were exalted over the heads of the cultivators, there was no community of caste and wide divergence of interests. Many, too, had come into possession of the village merely in satisfaction of a debt. The proprietorship was acquired, therefore, as no more than a means of squeezing a higher profit out of the estate. When, again, the village was made over to a cultivating headman in this part of the Province, his main thought was how to get as much land as possible out of the hands of his colleagues into his private demesne. The tenants, however, have been secured to a considerable extent against the encroachments of their landlord by the terms of settlement. Some were made proprietors of their "plots" or holdings, others are in "absolute" tenancy, protected thereby against ejectment and enhancement during the term of settlement, with other privileges. There are, then, the

| Class of Tenure. | Per Cent. |
|---|---|
| Proprietors' demesne | 17·0 |
| Plot proprietors | 4·5 |
| Absolute occupancy tenants | 13·8 |
| Occupancy tenants | 32·9 |
| Ordinary tenants | 23·0 |
| Village service tenants | 3·8 |
| Other tenure | 5·0 |

the "occupancy" tenants with a secure and defined *status*, and the ordinary tenant, who, from being at will, can acquire the occupancy rights by payment of fine. The Tenancy Act of 1884 abolished prescription against the landlord in respect to such rights, for special reasons, but conferred other privileges in regard to compensation and fixity of rent. The marginal table shows that over about half the tenantry the proprietor has little or no power; over 28 per cent. he has rights of ejectment or enhancement, and over his own demesne alone he has full lordship. It does not appear, however, from the re-settlement inquiries that there has been any general tendency to raise rents in the case of occupants and ordinary tenants beyond what is justified by improvement in the general condition of the surrounding country. The rental per acre is not more on an average than Rupees ·812, or about a shilling. In the Bundélkhand and Narbada districts the proprietor is in a strong position, and rental rates run up to 6 rupees, though the average is not more than 2 or 3 rupees. In the Nágpur tract there has been a good deal of-sub-letting, of which instances are given in the margin. The details for the villages in question illustrate, again, what has so often been mentioned in the review of the circumstances of other provinces, namely, that the better the title, the greater the tendency to pledge it. In this case we have only 15 per cent. sub-let of the area under tenancies-at-will, 27 per cent. of that under occupancy rights, and 30 of that under absolute tenancy. Then, again, where the soil is productive, the tendency to subdivide holdings is very marked and in certain cases the land held on the superior class of tenure has to be supplemented by the rent of other land held at will. On the whole, the proprietor and tenant are most in sympathy with each other in the more primitive country to the east of the province. In the Nagpur tract the proprietor is often a non-agriculturalist, and thus endeavours to make as much as he can out of his tenantry, but the latter is a strong body with customary right on their side in regard to fixity of tenure, fair rents, and compensation for improvements. The reverse is the case in what is known as the Saugor and Narbada country, where the land has been more exploited and competition for it runs higher than elsewhere. Here the proprietor has the upper hand, and rack-renting is common. Another method here practised of depriving the tenant of his share in the profits accruing from the rise in prices, was to fix the rental at half the produce, to be paid in wheat, or to require from the tenant wheat to the amount of from twice to three and a-half times the quantity sown. Special inquiry by the local authorities led to this custom being strongly discouraged by Government, and cash rents fixed wherever practicable. The superior classes of tenure have not suffered, for the most part, from such exactions, nor has the peasantry of the hill-tracts, except on the more open plateaus, where cultivation can be conducted on a better system than is possible in the broken country.

| Tenancy. | Paid by Tenancy. | Paid by Sub-tenant. |
|---|---|---|
| | Rupees. | Rupees. |
| Absolute | ·864 | 2·088 |
| Occupancy | ·849 | 1·807 |
| Ordinary | 1·120 | 1·650 |

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The Central Provinces are not less free from this burden on the cultivating and land-holding classes than other parts of India, in spite of the general rise in the profits of agriculture. Indeed, in some tracts under this Administration the amount of indebtedness is such as to have called for the special attention of Government. It has been mentioned above that long before the first settlement of the land assessment a number of villages had passed from the agricultural classes into the hands of traders, who exploited them simply for their personal profit. The increased value given to the land, not only by the rise in price of grain, seed, and cotton, but by the terms of the settlement, enacting an alienable and heritable right often at a nominal rent-charge, with fixity of tenure and other privileges, had its usual result in the reckless advantage taken of if by the possessors of such interests to expand their borrowing transactions in proportion to their new credit. During the current settlement, nearly 20 per cent. of the village lands occupied by proprietors, is stated to have changed hands, and half of the transfers were from the agricultural to the trading classes.

Agricultural indebtedness.

(*a.*) Amongst proprietors.

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classes. The connection between the value of the property and the depth of indebtedness is well illustrated by the fact that the latter is markedly greatest in the parts of the Province where the State assessment is the lowest, the land most remunerative, and prices and communication have improved most during the last 25 years. It is also noteworthy in connection with the relations between landlord and tenant, that it is precisely in these tracts that rents are most exorbitant, and, as the Commissioner of Settlement puts it, resort is had to inconsiderate rack-renting to provide funds which merely stimulate the recipients to further extravagance. The stronger the position of the tenant, the less the indebtedness of the landlord, as is proved by comparing the circumstances of Nágpur with those of the Saugor and Narbada tracts. In the case of this, the proprietary class, partition of estates is not carried out to the extent that it is in Bihar, the North-West Provinces or Oudh, and the main cause of indebtedness is personal extravagance and costly domestic ceremonies. At the same time, even where local credit is most dipped, there is no general insolvency such as might conduce to an agrarian crisis. Debts are large, but so is the security, and a prudent son often obliterates the results of the improvidence of his forefathers.

(*b.*) Amongst tenants.

The borrowing powers of the tenant, especially if he possess occupancy right, have grown, though less than those of the proprietor. Very often, indeed, the latter makes cash or grain advances to the former on a commercial basis which renders any enhancement of rent superfluous. Under the stimulus of the foreign demand, the wheat crop of the year is what the creditor is desirous of getting into his own hands, hence seed is advanced at extraordinary rates of interest, with heavy penalties on default of repayment, so as to keep up the lien of the creditor on future crops. In two cases quoted by the Commissioner of Settlement, loans originally valued at Rx. 6 and 14, were the subjects of claims brought into court of Rx. 99 and 294 respectively. But these advances are by no means the chief cause of indebtedness, as we find that the tenant, like his superior landlord, is given to spending an amount equal to from 10 to 15 years' rent on a single wedding in his family, with the object that so often animates this class, of outvying his neighbours. In the Chattisgarh, or Eastern division, the cost of such ceremonies, which is regulated by caste custom, is far less than to the North and West, whilst the wheat trade has not yet been established on the same footing as in these last tracts, so the produce is still sold year by year by the grower, instead of being forestalled by the enterprising middleman, the jingling of whose cash bag the western cultivator seems unable to resist. The Nágpúr tract comes between the Eastern and the Narbada and Saugor divisions in respect to the indebtedness of its tenantry. The latter being in a fairly good position as to tenure, have managed to keep the advantage of high prices a good deal to themselves. But their partiality for costly marriage-feasts, as elsewhere, introduces the money-lender. There are comparatively few, however, who are really embarrassed by his demands, and many keep on paying off old and incurring new, year after year, without pledging their holdings. But a certain amount of land has passed from the tenant to the trading classes, quite irrespective of the numerous cases where the creditor has the land on mortgage and the tenant only cultivates it on terms practically little better than those of serfage. The northern districts and the Narbada Valley, as has been above remarked, are those in which the indebtedness of the tenant, like that of the landlord, is the greatest and most widely-spread. The subdivision of land, too, has been carried further here than in the rest of the Province. Even in the Narbada Valley, however, amongst those in debt, who are estimated at some 80 per cent. of the total of the peasantry, only a very small proportion is really and hopelessly insolvent. Their clothing and houses are better, more carts and cattle are kept, and there is more hired labour employed on the fields than before. The area held in occupancy right, in contradistinction to tenancies-at-will, has everywhere increased during the current settlement. In the Eastern districts it has risen eightfold, and in few districts has it less than trebled. On the other side of the shield is the spreading cloud of debt, especially of the tenantry, which, though not heavy, is extensive, and overshadows a large portion of the Province. There is no doubt that much land, estimated at from 15 to 25 per cent. of that held, has passed from the peasant into the possession of the village-proprietor of late years in the Narbada tract, and that both here and round Nágpúr

Nágpúr and Wardha the trader is the real master of far more land than has been formally transferred to him, a feature which seems to be inseparable from any system which recognises the peasant's property in his land as a transferable or alienable right. CENTRAL PROVINCES.

As regards the condition of the agricultural labourer, we find here again the advantage is on the side of the Eastern division, where this class is often to a considerable extent a partner with his employer, and in other cases gets a fairly high wage in rice and clothing, and a few rupees are added in order to keep up the connection between the estate and the labourer. Round Nágpúr wages are higher, and more often paid in cash, though grain rates are also prevalent to some degree. The cash addition often made to grain payments is an innovation of late years, and the rate when cash only is agreed upon is considerably higher than at the time of the first settlement. The same remark applies with still more force to the Narbada tract, where, however, the rise in the silver value of grain has had the effect of curtailing the amount of produce assigned to the farm hands. There is to be considered, too, the large class of labourers, numbering, according to the last census, over 1,115,000 souls, who are not in permanent agricultural employment, but prefer that work to any other, and in its absence eke out their living on daily wage. They get full work during the harvest of rice and wheat, and on this their savings for a great part of the year depend. Their remuneration in grain has been little altered, in spite of the rise in market rates, except in the unfortunate Narbada Valley, where custom has succumbed to trade competition. Cash wages have risen in this class as in that of the farm hand, but by no means proportionately to prices, especially if on monthly or annual engagements. That there is no considerable depression or want of work amongst the daily labourer class is proved by the difficulty of attracting its members on to railway or road works, which are gladly undertaken by men from Oudh and even from the Panjab. They are said to be able to pick and choose their work, to be highly improvident, and in debt to the full extent of their credit. Field labour.

The Gonds and allied tribes are the remains of the former possessors of the whole tract under review, but within the last century and a-half they have been mostly driven off the fertile plains to the less desirable forest and hill country. They are chiefly agricultural, and the census shows they are not falling off at all in numbers. Many of the larger zamindars, or estate-holders, are of the Gond tribe, though the rise in their worldly position has induced them to adopt some one of the higher titles of the Hindu caste scheme. Wherever land is worth having, the money-lender is to be found at hand, and it is only where the estate is strictly inalienable that the family of the grantee can be kept in possession. The proprietary body, again, are heavily in debt, not from expenditure on ceremonies so much as from drink. For generations this class of people has fortified itself against the malaria of its native forests by the use of locally-made spirits, but this taste has of late years been exploited by professional liquor-sellers from the plains, who, of all the classes of creditors found in the province, are said to be the most unscrupulous and rapacious, yet the Gond seems to flourish in spite of these disadvantages. The cultivation in the hands of the more settled villages of this tribe has largely increased in area since the first settlement, and some of the estates show signs of improved agriculture. Numbers of Gonds, too, come to the plains for the wheat harvest. Besides grain and forest produce the only necessary of life to the Gond is his liquor. There are other communities in the depths of the forest still living the life of the savage, and trusting to the chase, to primitive husbandry, and to fruits, rats, mice, lizards, &c., for their livelihood. Their wants are so few that they rarely find themselves in a state of destitution, though they manifest little disposition to improve their circumstances. The Forest tribes.

Perhaps the non-agricultural class which is normally at the lowest ebb in this Province is the village-herdsman, but owing to the relief he affords to the cultivator by undertaking the charge of the cattle during the day, he is maintained by the community. The ordinary village industries, carpentry, and blacksmith's work are paid in grain, and also find an opening in the railway workshops and mills of the larger towns. The potter and leather-worker have always been in a somewhat depressed condition, but have not, like the oil-presser, been much hurt by foreign competition. The weaver class here The non-agricultural classes.

CENTRAL PROVINCES.

appear from the early records to have been in sorry case sixty years ago, when an inquiry was made into the condition of the various classes of the community. They are sprung from the lower grades of village menials, but are now sub-divided into the workers in finer fabrics and those who do not attempt anything beyond the coarser. The former are firmly wedded to their loom. The latter have adapted themselves to circumstances, and taken to other occupations, since the competition of English goods deprived them of their former trade. The better class, again, have had a period of prosperity to look back upon, so that their standard of living is now lower than it was. The others have always been in the lower strata. In all these classes, weavers, carpenters, goldsmiths, and so on, the tendency is said to be to ape the marriage ceremonies of those superior to them in social rank, and, consequently, to spend a year's earnings, or even more, on a single wedding. As their credit is small, their savings must accordingly be considerable. As regards the rest of the community the conditions of their life in this Province do not materially differ from those already described elsewhere. Law is the only profession that really flourishes, and the rest suffer from the general rise in food prices. There has not been any tendency on the part of these classes to take to commerce, which, with law and money-lending, are the most lucrative non-agricultural means of livelihood here, as in other parts of India.

## BERAR.

BERAR.

The "Haidrabad Assigned Districts" form the link between the Marathi tracts of the Central Provinces and Khandesh, the eastern frontier of the Bombay Presidency. With the exception of the hill tribes north and south of the Province, the population is almost entirely Maratha in language and character. Its fertility and similarity to the adjacent Deccan tracts attracted a considerable number of immigrants during the early days of British administration, and the large area under cotton gave it great importance whilst that staple was in high demand between 1862 and 1866. The famine of 1876–77, again, sent a fresh accretion of immigrants from the south-west, but during the decade under review the movement appears to have somewhat stopped, and, indeed, it is probable that a good many who came to this Province in their time of distress returned home soon after the drought had been dispelled. The rate of increase has thus been normal, and stands at about 8½ per cent., or below that in the Central Provinces and Khandesh. The increase has, as usual, been heavier in the outlying tracts than the central. One of the latter, in fact, shows a slight decrease, and in another the expansion is little more than nominal. It seems from the census returns that this result is due to a movement of the local population from the centre to the borders of the Province, finding better land available in the latter tracts. The town population bears a proportion to the total of 12½ per cent, and is comprised chiefly in three or four middle-sized towns on the line of rail. It has increased in a slightly higher ratio than the rural community, owing to its connection with the export trade from Bombay. The agricultural population, including forest tribes, is in a proportion rather above the average, as might be suspected from the natural advantages of the tract. The distribution of produce is somewhat unusual for India, as so much of the cultivated area is under non-edible produce. It will be seen from the marginal table that the cropped area has increased but slightly during the last 10 years, as most of the better class of land was in private hands before 1881, and a good deal of inferior land had likewise been taken into occupation for grazing. Thus it is estimated that little more than 200,000 acres, and those of comparatively poor quality, are now available. As the population now stands, and probably for many years to come, the local food supply is ample for all requirements. The estimated consumption of food-grain is about 510,000 tons per annum, and the crop available in

| Crops, &c. | Acres Cultivated. | | Percentage on Total. | |
|---|---|---|---|---|
| | 1891–92. | 1881–82. | 1891–92. | 1881–82. |
| Total cultivated | 6,665,005 | 6,641,023 | 100 | 100 |
| Great Millet | 2,155,555 | 2,294,260 | 32 | 34 |
| Wheat | 887,984 | 692,642 | 13 | 10 |
| Pulse | 424,678 | 392,951 | 6 | 6 |
| Oil-seeds | 466,524 | 514,009 | 7 | 8 |
| Cotton | 2,241,489 | 2,189,688 | 34 | 33 |

in an average season allows a surplus of some 150,000 tons for export, after replenishing the seed-reserve and providing for the cattle. It will have been noted, likewise, that the supply is grown on only 45 per cent. of the cultivated area, and that in Berar it is the custom, as in the North Deccan, to keep a considerable portion of a large estate under fallow each year. In the balance of the cultivated land, cotton and oilseeds are the chief crops, but pulse is also grown to some extent in the winter. The seed of the cotton is largely used for cattle food, and the stalks serve the same purposes as cane or wicker elsewhere. BERAR.

The market price of this product is, therefore, a factor of some importance in the economy of the Berar peasant, and the marginal statement shows the variations recorded since 1882–83 in the rupee price of the local measure of 267 lbs. at the chief market. Pressing has advanced from Rupees 2·75 to Rs. 3·5 per bale. From 10,000 to 75,000 tons of wheat leave the Province every year. The millet is stored in well-made pits, and produced as required. It is said to keep good here for many years, as it does in the Deccan.

| Year. | Price per 267 lbs. Cotton. |
|---|---|
| | Rs. |
| 1882–83 | 51 |
| 1883–84 | 59 |
| 1884–85 | 60 |
| 1885–86 | 52 |
| 1886–87 | 53 |
| 1887–88 | 61 |
| 1888–89 | 62 |
| 1889–90 | 64 |
| 1890–91 | 42 |
| 1891–92 | 51 |

The upper classes import rice, of which the value was returned at Rx. 93,365 in 1881 and Rx. 132,868 ten years later. The Province is bisected by the main line between Bombay and Nagpur, with feeder roads to the main stations. In 1881 there were 703 miles of road, and in 1891, 858. The consequence has been the same as in Upper India, that the producer attends the central markets in person, in place of handing over his crop to the village shopkeeper, who combines the functions of grain and cotton dealer, and money-lender. There has been a notable increase in the number of steam cotton presses. In 1881–82, there were 16, and now they number 27, besides 48 gins and a weaving mill. The rail-borne trade of the Province varies considerably from year to year, according to the outturn, as shown in the margin. On the whole, the 10 years just completed result in an excess of exports to the average value of Rx. 147,000 annually.

| Year. | Imports. | Exports. |
|---|---|---|
| | Rx. | Rx. |
| 1881–82 | 1,860,300 | 3,347,190 |
| 1882–83 | 2,254,400 | 3,070,200 |
| 1886–87 | 1,958,200 | 3,943,700 |
| 1889–90 | 1,938,000 | 4,263,700 |
| 1891–92 | 1,967,300 | 4,120,200 |

The whole of the land in Berar is held on the raiatwari system. The State, that is, deals direct with the occupant. The land taken up has increased by over 5 per cent. since 1881. The assessment, which is fixed on the system in force in Bombay, averages Rupees 0·875 per acre. The heaviest rate is in Akola, when it reaches Rs. 1·255, sinking to Rs. ·443 in Wûn. But if those lands be excluded which are held at privileged rates, Elichpùr shows the highest incidence, Rs. 1·646, and Wùn has still the lightest burden, though it increases to Rs. ·505. The provincial average then becomes Rs. ·911. That this incidence presses but slightly on the resources of the agriculturist is shown by the ease with which it is collected year after year. In 1881–82 a demand of Rx. 646,574 was realised within Rx. 169, and in 1891–2, for a demand of Rx. 697,198, distraint was enforced for Rx. 71 only, whilst in the whole decade no remissions have been necessary. State assessment on land.

| Year. | Occupied area. | State Assessment. |
|---|---|---|
| | Acres. | Rx. |
| 1881–82 | 7,312,279 | 636,776 |
| 1891–92 | 7,714,099 | 674,226 |

To say there was no indebtedness in Berar would be tantamount to denying that the peasantry belong to India. The usual course of borrowing extravagantly for domestic ceremonies is followed, and what with an illiterate debtor and high compound interest, there is seldom any chance of closing the account. At the same time, it is only the poorer cultivator that has to make over the whole of his crops to his creditor. The rest go on, as elsewhere, on a sort of running account, and the local rule protects the land against sale in execution of a decree, except with the sanction of the head revenue authority. The bulk of the money-lenders are foreigners from Rajputana and North Gujarath, who are averse from incurring the responsibilities of landlordship, so do not try to get the cultivator off his holding, but squeeze him in his possession. Indebtedness.

Labour is paid in cash to a rather unusual extent in the rural tracts, and the wages run from Rx. 2·5 a month with food and clothing, to Rx. 9·6. In the more backward parts of the Province, payment in kind is still prevalent, and harvest work is usually remunerated by a share in the crop reaped. The artisans being

BERAR.

being chiefly of the village class, are either semi-agriculturists or receive wages in produce. Thus the rise in grain prices does not affect them. This rise is shown in the margin for the three chief articles of consumption. Millet, the most important, has nearly doubled in price, and Rx. 186 is paid for what could formerly be got for Rx. 100. The price of wheat is necessarily more variable, owing to its dependence on foreign demand. The condition of all classes in this province is, on the whole, prosperous, though of course the relatively high price of grain is not appreciated by those who live on fixed cash payments without land. These, however, are a small class compared with the number to whom the rise is the main source of profit.

| Food. | Price compared with 1881–82: Rx. 100. |
|---|---|
| Great millet | 186 |
| Wheat | 146 |
| Pulse | 150 |

## BOMBAY.

BOMBAY.

THE Presidency of Bombay comprises within its limits tracts more widely differing from each other in respect to the present subject, than are to be found in any other province. Sindh in the first place, owns but a political connection with the rest, and its physical attributes are those of the Lower Panjab. The two littoral divisions, known as the Konkan and Gujarath, are, otherwise than as regards position, further apart from each other than even the former and the Deccan plateau, which overlooks it. Between the Deccan and the Karnatak, on the contrary, there is far less divergence than between the Deccan proper and Kandesh or the Tapti valley by which it is bounded on the north, and which is included under the general title for administrative convenience. These four divisions, constituting the Presidency proper, bear sufficient resemblance to each other in the system of cultivation and the administration of the State land, to be considered together.

Sindh.

*Sindh*, however, must be taken separately, and from the present point of view there is not much that need be said about it, because the general prosperity of its inhabitants requires but little explanation. The proportion of town population is 12 per cent., or somewhat above the average, because, as in the case of Burma, three or four large towns have sprung up in strong contrast to the general sparsity of the rural population. Karachi showed at the last census the most rapid growth of any town of its size in India, and Sakkar and Haidrabad, have also prospered during the decade. Shikarpur, the former trade centre of Upper Sindh, has lost that position to some extent, as it lies off the main line of traffic with the north. The population as a whole, has increased by nearly 19 per cent., or separating the two classes, by 17½ per cent. in the country, and 31 in the towns, thus sharing with Bengal the peculiarity of a higher rate of growth in the latter than in the former. Still, the agricultural class is as high in its ratio, to the total population, as in other parts of India, but owing to some misconception in classifying the census entries, the proportion cannot be stated numerically. The welfare of this class depends on the inundations of the Indus, except in the desert uplands of the eastern district. Cultivation therefore varies greatly from year to year, according to the extent of the overflow. Taking two years only, in 1881–82, the total area cultivated, was returned at 2,121,000 acres, out of which about 1,602,000 were irrigated, and in 1891–92 the cultivated acreage was 2,945,000, with an irrigated area of 2,601,000 areas. The State assessment on the land itself amounts to an incidence of no more than 1·297 rupees, but the canal rates bring it up to 3·547 rupees. This demand is collected with ease. The average of 10 years shows that 91 per cent. of the total was realised within the year, and 4·80 left outstanding. Of the rest, about 1·60 was written off, and 2·53 remitted. As to the last item, it should be remembered that the term here included the revenue not collected, because the land on which it is assessed did not receive the average amount of irrigation during the cultivating season, owing to a low inundation, breaching of channels, or similar causes. The amount collected rose Rx. 534,721 in 1881–82, to Rx. 731,849, and the fact that in the last year of the decade it fell off again to Rx. 678,806, is a good illustration

illustration of the variable character of the cultivation. On the whole, however, the extension of the canals and channels from dams by about 600 miles, has raised the average area under tillage each year very considerably. The acreage twice cropped was in 1891–92 235,415, whereas 10 years ago, it was probably not more than half that figure. The returns make it about 93,000 but some allowance has to be made for more accurate survey. Then again, the marginal figures show that food crops occupy nearly the whole area, and the 450 miles of railway to Karachi, with the 480 miles of navigable river, enable the wheat and oilseed growing tracts to compete with the Panjab. The arable land still unoccupied is returned at over $5\frac{3}{4}$ million acres, and if the returns be accurate, the population are supported on little more than an acre per head. At all events, the year's crop suffices for all the wants of a rapidly increasing population, with the exception of a few villages in the centre and desert portions of the Province, where the soil is shallow, and irrigation is impracticable. It is said too, that the Sindhi eats, as a rule, nearly half as much again as the peasant of the rest of the Presidency, and being chiefly Musulmans, meat and fish are freely eaten by all classes. The lower classes of tenants in the districts of Karachi and Haidrabad are undoubtedly hard pressed in a year of bad inundation, and have in many cases to seek for labour on the canals for a couple of months or so, but a good year is said to maintain them in addition to clearing off any debt they may have contracted the year before. The supply of ornaments in the houses is reported to be considerable, but it is only made known after a fire or robbery. Their position with regard to the estate holders, has been much strengthened since the British occupation, and if any class in Sindh has suffered from the change of rulers, it is the large landed proprietors in whom the general security of property has, as it tends to do everywhere in India, bred great personal extravagance in some cases, so far as to necessitate special legislation for its temporary relief. The growth of trade in Karachi and other towns along the rail, the construction of the new line to the east of Haidrabad, and the continual work on the extensive canal system affords means of subsistence to the ordinary labouring classes, and as the census shows, enables them to multiply along with the rest. The money-lender is by no means idle in this province, but like the cultivation, his transactions are fitful; and there is no class, except perhaps the landed gentry, that are at present so completely in his power as is the case with some that can be found in the less favoured tracts to the east and south.

| CROP. | 1881-82. | 1891-92. |
|---|---|---|
| | *Acres.* | *Acres.* |
| Wheat | 225,944 | 418,704 |
| Rice | 518,209 | 682,206 |
| Great Millet | 493,693 | 432,466 |
| Pulse | 82,839 | 205,889 |
| Oil-seeds | 122,463 | 297,414 |

Sindh.

In *Bombay*, for instance, to the circumstances of which province we can now pass, there are far greater varieties of condition. The population, on the whole, increased by $13\frac{3}{4}$ per cent. between 1882 and 1891, but most of this must be attributed to the remarkable recuperative power shown by the inhabitants of the Deccan and Karnatak divisions after the famine of 1876–77. In the former, the six districts increased by 17 per cent., the rate being higher as the distress of the years above mentioned was more acute. In the Karnatak the same feature is observable, and as the three districts were all seriously affected, the rate on the whole area is just under 20 per cent. In the Konkan, or sea-coast slip, a portion of the $9\frac{1}{2}$ per cent. increase is no doubt accidental, and due to the number of women who used to come to Bombay for the working season, but who now, as stated in a preceding part of this chapter, stay at home. The fertile plain of Gujarath shows a rate of increase that may be considered normal, namely, about 8·4 per cent. It is noticeable, however, that some of this is due to the attraction of the waste land in the smallest district, that known as the Panch Mahals, where the rate advances to 22·7. The more thickly-peopled tract does not rise above 8, and for the most part is restricted to 7. Thus, whilst the seven famine districts indicate a recovery to the extent of $19\frac{1}{2}$ per cent. over the figures of 1881, the rest, including the capital, have increased their population by $10\frac{1}{2}$ per cent. only. In both cases the urban community has grown more slowly than the rural. The manufacturing and trading population is proportionately rather above the average in this Presidency,

Bombay.

BOMBAY.

Cultivated Areas.

and the class subsisting entirely by agriculture, is in a ratio not much above 66 per cent. on the total. The statistics of cultivation do not afford means of accurate comparison between the present time and many years back, owing to the extension of survey operations and other accidental causes. There is a considerable area too, the right to the assessment on which, has been assigned to proprietors, from whom detailed returns are not demanded, so the numerical relationship between the land and the population is not ascertainable. The return for the area under full State assessment increased during the decade by over $1\frac{1}{4}$ million acres, and the acreage cropped more than once in the year rose from 337,600 to 432,800. Irrigation is carried on from tanks to a considerable extent only in the north and south of the Presidency. Wells have increased in the five years for which statistics are given from 163,400 to 173,600, and are expected to show a still more rapid rise in the next five years, when the Gujarath re-settlements take place. Of the increase recorded above, over 7,000 of the new wells are returned from the Deccan and Karnatak, where they are most wanted to save the crops in times of deficient rainfall in the autumn, or to keep up the supply of fodder in the spring. The State irrigational works, too, are mostly in the Deccan, but the acreage under them actually using the water, though it more than doubled during the decade, is still no more than 64,700.* The area of fully assessed land still available for cultivation is about $1\frac{1}{4}$ millions of acres situated chiefly in the Panch Mahals, Khandesh, Bijapur, and Sholapur districts. In the first two, the quality is probably little inferior to that already taken up, but in the rest of the Province it is not likely that much good land has been left out of occupation, whether it be actually put under crops or not. The marginal note indicates this by the difference between the rates of assessment. In respect to fallows, it should be observed that in this Province the holder pays for occupation not for cultivation, and the area held uncropped, which was about 3,100,000 acres in 1881–82, was 5,383,000 acres in 1891–92. Part of this difference is attributable, as in other provinces, to more correct registration by the village officers, but in the Karnatak it is to some extent due to the practice of keeping hold of an estate too large for the occupant to work all at once, or which contains a good deal of lightly assessed shallow soil.

| DIVISION. | Incidence per Acre on Land Assessed at full Rate. | | |
|---|---|---|---|
| | Un-occupied. | Occupied. | |
| | 1890–91. | 1890–91. | 1881–82. |
| | *Rupees.* | *Rupees.* | *Rupees.* |
| Gujarath | 1·437 | 2·687 | 2·875 |
| Deccan | 0·422 | 0·760 | 0·719 |
| Karnatak | 0·391 | 0·854 | 0·844 |
| Konkan* | 0·797 | 1·687 | 1·266 |

* Including Kanara.

Crops.

The chief crops grown are shown in the marginal table. The year selected is 1890–91, because the last year of the decade was characterised by a failure of rain in the Karnatak division that effected a material change in the distribution of the sowings in that large tract, whereas the circumstances of the preceding year were normal. The food crops covered about 79 per cent. of the area cultivated, and of the rest, cotton and oilseeds are the more important. Comparing this return with that for 1885–86, the first prepared on the same basis, the area under food crops has grown by 442,000 acres, and that under cotton and other non-edible produce by 647,000. Wheat, however, is hardly to be taken into account as a staple article of food, except in one or two districts. The out-turn of food, omitting wheat, pulse, and vegetables, is estimated locally at 5,557,700 tons from the 15,631,000 acres, on which the calculation was based. The estimated consumption is 3,225,000 tons, leaving for seed, cattle, and sale, some 2,332,000 tons. The incidence of the State assessment on occupied land has been shown above in connection with the area available for expansion of cultivation. The average rates, especially the low incidence in the Deccan and the Karnatak, in both of which there is abundance of fertile land, are fixed to a great extent, in consideration of the uncertainty of the rainfall in those plains. The course of the realisations of this revenue prove that the demand is easily liquidated. During the 10 years ending with 1890–91, the average annual

| CROP. | 1890–91. | 1885–86. |
|---|---|---|
| | *Acres.* | *Acres.* |
| Wheat | 1,912,803 | 2,067,029 |
| Rice | 1,599,907 | 1,528,122 |
| Jowari | 8,322,132 | 7,987,828 |
| Bajri | 4,449,356 | 4,500,828 |
| Ragi | 681,975 | 646,539 |
| Kodra | 252,893 | 236,102 |
| Other cereals | 824,856 | 729,130 |
| Pulse | 2,293,411 | 2,228,079 |
| Cotton | 3,052,207 | 2,147,897 |
| Oil-seeds | 1,585,918 | 1,830,581 |
| Twice-cropped | 545,574 | 527,444 |

* The latest Departmental return, however, gives the area as 96,000 acres.

annual remissions were only in the ratio of 0·23 per cent.; 98·40 per cent. was recovered within the year in which it fell due, and a little under 1 per cent. was postponed or left over. The returns show that coercive process was issued in the proportion of 13 only for every Rx. 10,000 of the demand, with an average amount in default of Rx. 18. The occupancy right was forfeited in 486 cases only, out of a total number of 1,075,638 holdings under the ordinary tenure, the amount involved being but Rx. 1,530, out of Rx. 2,888,400 demanded. BOMBAY.

The greater part of the Presidency is fairly supplied with roads, and is well served by several through lines of railway, with numerous branches across the more fertile tracts. In the ten years under review, the railway mileage increased by over 57 per cent. not counting the lines opened in Kathiawar and Baroda. Roads have been driven through the poorer tracts, such as the Ghat country and the Konkan below it; tracts which from their inaccessibility, have often suffered severely when the local crops have partially failed. The Konkan, again, has been much benefited by the increased steamer service between the southern ports and Bombay, by means of which a constant flow of labour to and from the relatively crowded district of Ratnagiri is maintained throughout the open season. The failure of rain in the South Deccan in the year 1891–92 affected the supply of forage and water more than of grain. Still, the ordinary tendency of the latter to rise was held well in check by the instrumentality of the Southern Maratha Railway, which has sprung into existence since the great famine. In 1876-77, the price of millet in the three chief markets rose by 62 per cent., but in 1891–92, the rise was but 24. The distress was really serious amongst the live stock, but human beings held their own, except where the failure of water either drove them to move with their cattle for the rest of the dry season to the Ghat tracts, where forest grazing was thrown open, or where the health of those that stayed at home was injured by the use of the deteriorated supply from the depleted tanks or wells of their native village. That the poorer classes were not hard pressed is indicated by the fact that, on opening relief works, only 5,800 were found to attend them. Communications.

The prices of agricultural produce have varied during the decade to the extent shown in the margin. Except in one instance, there has been a considerable rise all round. The local fluctuations are by no means uniform, indicating the uncertainty of the seasons in the different divisions. Even in the Konkan, the poorest tract dealt with, the common sort of rice which is there grown shows a fair advance. In this Presidency there is no State record of rights in the land below those of the persons registered in the accounts as occupants, who are responsible to the Government for the assessment of their holdings, whether or not they enjoy the possession of the latter, and whether they cultivate it in person or let the whole or any portion to tenants. There are, necessarily, provisions for the relaxation of the general rule, and for the recognition of the tenant's position in special cases; but, generally speaking, as long as a man's name is on the register, the State makes no deeper inquiry. In Gujarath and the Konkan there are other forms of tenure. In some instances, the village lands are partitioned out in a special way; in others, there is joint village responsibility, as in parts of Upper India. In the Konkan, or rather in the southern portion of it, where the Peshwa connection was strong, the Khot system approaches, in its relation between proprietor and tenant, to the Zamindari of Bengal, the former being usually a Brahman, and the latter a Maratha, or other cultivator. It is a coincidence that where this tenure prevails, there is the greatest pressure on the land, and the district is almost the only one in the Presidency which does not grow sufficient grain to support its population, and where some of the latter are obliged, as in Bihar, to resort to annual migration Prices.

| YEAR. | Gujarath. | | | Deccan. | | Karnatak. | | Konkan. |
|---|---|---|---|---|---|---|---|---|
| | Jowari. | Bajri. | Rice. | Jowari. | Bajri. | Jowari. | Bajri. | Rice. |
| 1882 - - | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 | 100·0 |
| 1883 - - | 105·5 | 104·0 | 97·7 | 118·6 | 119·9 | 119·9 | 106·9 | 103·3 |
| 1884 - - | 107·3 | 95·5 | 110·8 | 151·3 | 135·6 | 149·0 | 131·5 | 120·0 |
| 1885 - - | 102·8 | 96·3 | 110·3 | 133·9 | 125·9 | 169·7 | 157·7 | 111·4 |
| 1886 - - | 106·7 | 93·0 | 115·9 | 114·6 | 117·3 | 136·4 | 130·0 | 114·8 |
| 1887 - - | 121·8 | 104·8 | 111·6 | 112·5 | 113·8 | 130·4 | 119·5 | 118·0 |
| 1888 - - | 133·6 | 118·2 | 117·4 | 151·1 | 140·0 | 147·1 | 136·2 | 112·7 |
| 1889 - - | 123·7 | 105·5 | 132·7 | 156·8 | 150·3 | 164·4 | 155·6 | 125·7 |
| 1890 - - | 112·9 | 95·2 | 129·5 | 137·5 | 121·2 | 160·8 | 138·2 | 113·9 |
| 1891 - - | 112·5 | 96·7 | 123·2 | 122·8 | 119·5 | 148·8 | 136·7 | 123·7 |
| Average - | 111·8 | 100·5 | 113·9 | 127·6 | 122·7 | 139·4 | 128·7 | 113·8 |

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tion for a living. It furnishes, too, the bulk of the indigenous recruits for the local regiments. Though there is something like the occupancy tenure in some cases, the rental is high, and a great number of the tenants are unprotected against the demand of their non-agricultural landlord.

Agricultural Indebtedness.

The peasantry of this Presidency are probably in much the same position as regards indebtedness as their fellows elsewhere, since the same influences are in operation. Where the soil is fertile and the season pretty certain as in Gujarath, the cultivator is prosperous, and his debt does not oppress him. The middle classes save. Those of the upper classes, who enjoy a special proprietary tenure of their estates, have, like the same class in Sindh, Oudh, and wherever they are numerous, to be periodically helped out of the slough of debt incurred through their personal and domestic extravagance. The lowest of the agriculturist class, who are but little removed from the grade of field labourer, are, in Gujarath, of a wild origin, near akin to those who still inhabit the neighbouring forests. In all the less populous tracts they are given to drink, and to indulgence in this habit is attributed a good deal of their bondage to the money-lender and liquor seller, who are occasionally one and the same person. In the rest of the tracts they occupy, the cultivator of this class follows the example of those above him, and as his profits rise, so does his desire to outshine his caste-fellows in the cost of the marriages in his family. He is said to not unfrequently revert to the original condition of his tribe, except that he lives from hand to mouth as the serf of his creditor. In all parts of the Presidency, now that railways have opened out the country, the small tenant or occupant and the village menial, instead of devoting their whole time to field work, travel either to the nearest large town, taking their cart and bullocks when they have them, or to a distant wheat harvest, and thus make up the income that their land alone cannot produce. The Nadir of the condition of the masses is found in the southern Konkan, as just mentioned. The country is hilly, so that road-making is costly, and through routes are few. The soil is shallow, though in the valleys, owing to the constant detrition of the rock under the heavy fall of rain during the summer months, there is a fair area of good rice-land. The population has here multiplied nearer than in any other part of the province to the margin of subsistence. There is a certain relief afforded by the demand for army recruits and for labour in Bombay, of which advantage is taken by about a tenth, or slightly more, of the population, but the condition of the lower classes is undoubtedly poor, and the district has to indent annually upon the nearest Deccan districts for food-grain. On the middle class of cultivator, as above remarked, the demands of the landlord weigh heavily, but the seasons are certain, and the customs of the people as to ceremonial and way of living are frugal, so there is little tendency to run heavily into debt, except on account of the rent due to the Khot landlord, or for seed after a short crop of rice or millet. In the Deccan and Karnatak, which may be taken together, the two main factors to be considered are the uncertainty of the rainfall and the improvidence of a large section of the people, especially in the central portion of the plateau, due, in a great degree, no doubt, to the precarious enjoyment of their land and other property during the rule of the Marathas, when a good crop only meant a higher revenue demand. The indebtedness of this tract has attracted more attention of late than that of any other part of India, because of the attempts made to meet it by special legislation. But it was as prominent a feature in the economy of the tract when the latter was first occupied by the British in 1817 as it is now, though the improvement of credit, due to the change in the system of land administration, has no doubt brought a lower class on to the village money-lender's books. Still, it is a fact worth noting that in the days of the Peshwa the Deccan raiat is described as undergoing "the hellish torments of Sisyphus" at the bidding of his creditor, who managed to convert a small debt into a comfortable annuity. It is impossible to give in this review more than an outline of the special measures that have been taken in connection with the agricultural indebtedness in this tract since the first formal inquiry into the subject in 1875. The outcome of that investigation into the circumstances of the cultivating classes of the Deccan was the Supreme Legislature's

Special legislation on agricultural debt.

Act

Act XVII. of 1879, which has been since amended, first, in 1881, again in 1882, and a third time in 1886. The influence that had to be counteracted was stated in 1875 to be that of usury, or exorbitant interest, excessive powers of realising debts, *ex parte* decrees, loss of land by private sales, the law regarding limitation, fraudulent transactions or agreements, and the rigid procedure of the civil courts. The last it was possible to remedy when the Civil Procedure Code came under revision in 1877. The Act of 1879 provided for special procedure for simplifying suits of the classes most generally affecting the agricultural population; for entering into the history of the transactions in question instead of being bound by the letter of the bond; for opening an account on the transactions proved to have taken place, fixing instalments, altering rate of interest, resort to arbitration, exemption of agriculturists from arrest for debt, and his property from sale unless specifically pledged for the repayment of the debt for which a decree has been passed. Other provisions related to insolvency, receipts for money or other payments, the establishment of Conciliators and Village Registrars, and a special period of limitation. The later Acts passed in amendment of the above, made provisions regarding the dealing with mortgages, allowed the representation of parties by legal practitioner, which had been originally prohibited; enlarged the powers under the Act as to insolvency and the authority of the Conciliators, and required that both parties to a suit should be examined, unless for special reasons the Court dispensed with this proceeding, and several other modifications. A special judge was appointed to supervise the working of the new law, and this office was held, first, by a European, and after him, by a Maratha Brahman, taken from the highest rank of the subordinate judicial service, and who has since been appointed to a Judgeship of the High Court. As the evils which the Act was intended to remedy were extensive and varied, the original legislation was undertaken, on a comprehensive basis, by the Government of India. In course of time, it was found that in other parts of India a state of affairs was either imminent or actually prevalent, similar, in its general features to that which led to the inquiries of 1875 in Bombay. In order to see, therefore, what had been the results of the working of the special legislation in the Deccan, the Supreme Government appointed a Commission, by the report of which it might be guided in deciding whether corresponding action might be undertaken elsewhere with a reasonable expectation that by it the evils arising from agricultural indebtedness might be successfully combated. That report has been prepared, but pending the full discussion of it by the local authorities interested in the past course of the special measures and in the question of their further extension, it has not been finally considered. In view, however, of the importance of the subject, it is well worth while to take the opportunity of quoting the general opinion upon the question of a body of trained investigators, judicial and revenue, European and Native, from different parts of India. In the view, then, of this Commission,— BOMBAY.

"A legislative enactment whose aim is merely (1) to afford agriculturists equitable relief from unduly inflated claims, and (2) to enable agriculturists when incurring obligations to understand clearly the terms and consequences of those obligations, can obviously have little or no effect on the causes which tempt or drive the agricultural population into debt. Among such causes are extravagance, improvidence, idleness, and want of energy, which, while common to all classes, would appear to be especially fostered, but by no means to the same extent in every case, by the capricious climate of the Deccan. It is not unusual to find in the Deccan villages situated side by side and to all appearance similarly circumstanced in respect of soil, assessment and tenure, in some of which the people seem hopelessly sunk in debt and entirely dependent on the money-lender, while in others they are free from encumbrances and accustomed to rely on their own resources. But the main cause of indebtedness would appear to be the capriciousness of the climate. A common remark made by the people to the Commission during their local inquiries was that during the last year or so debts had increased. More detailed investigation showed that all that was meant by this remark was that the last few seasons had in those villages been unfavourable, and the produce had been insufficient to pay the revenue and

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support the cultivator till next harvest, Under these circumstances the cultivator, if unable to make up the deficiency in other ways, had no option but to borrow; and if already in debt, the burden of that debt was increased by the amount of interest which it carried."

"While, however, it is impossible to say whether the amount of debt is greater or less than it was 13 years ago, there is a considerable body of evidence to show that the position of the ryot is much stronger and more independent than it was. Some have become more thrifty, and manage to get along without borrowing. Dealings with fellow ryots have to a much greater extent than formerly taken the place of dealings with professional money-lenders. There was a considerable number of these agricultural money-lenders at the time of the Riots Commission, but the amount of their business was then small. Though the terms demanded by both classes of lenders appear in most cases to be identical, there is no question that the agriculturist creditor is more amenable to public opinion and more considerate in his treatment of the debtor than the sahukar. Most important of all, however, is the fact that the custom of making the crop over to the local bania has lost ground, and the ryot now, as a rule, takes the harvested produce into the market. Much of this striking improvement is doubtless due to the great expansion of trade and the opening of new fields for labour which followed the construction of the Dhond-Manmar and the Southern Maratha Railways, and the extension and improvement of other communications; to the introduction in places of irrigation from canals and tanks, and to a run of seasons following the commencement of the Act, which, if not uniformly good, were, for the Deccan, apparently above the average; but there can be no question that the Act has materially helped the ryot to profit from these advantages."

The Commission propose some modifications, more or less far reaching, in the Act, and conclude with an opinion that this legislation should not only be retained in the Deccan, but might with advantage be extended to other provinces where the problem of agricultural indebtedness has presented itself. It will be seen from the above quotation that in several of its features the condition of the Deccan in this respect is similar to that of many other parts of India. But the question has here the special characteristics of an abnormal uncertainty of outturn, and a remarkable homogeneity of race and class amongst the landholding population, with an equally marked reverence for hereditary right, whether to land or position. In this respect, the supersession of native money-lenders by the foreigners from Gujarath and Rajputana is a matter of greater importance than a similar movement would be elsewhere, where society is more split up. Moreover, the main cause of indebtedness seems to be not social, as in most other parts of the country, but climatic, and the aid of such powerful agencies in counteracting drought as the great snow-fed rivers of the north is here out of reach. Over a great part of the arable area, too, irrigation would be of no avail, as the nature of the soil prevents it from repaying in full more than a small supply of water; but that little must be timely. The case of the Deccan is summed up in the old Maratha proverb about the rich soil of the Don valley, near Bijapur, "If Don bears, who can eat it; if Don fails, who can eat?" The railway has solved the riddle to some extent, but the habit of being always one harvest in advance of the season cannot quickly get a footing where a bumper crop is exceptional and several inferior years in succession a not unfrequent experience. On the other hand, the results of a few seasons without exceptional ill-luck are exhibited beyond the possibility of misapprehension in the census returns which have been already quoted above. It is equally certain that in the present circumstances of the Deccan and Karnatak there will be no such collapse as was witnessed in 1876–77. But that both the smaller landholders and the rural labouring classes are still abnormally sensitive to short harvests cannot be doubted. The condition of the semi-reclaimed forest tribes of the Ghats and the tract at their immediate foot is much the same as that of their fellows in Gujarath. Their cultivation is of the rudest, and the shortness of their crop is made good by resort to forest produce for food during the dry season. In the malarious and damp climate of the country they

they affect, the custom of drinking spirits distilled from the Mahua, or Mhauda. flower is very prevalent, and often carried to excess. A certain number of the more civilised tribes come down to Bombay every year for work, and their wild country has recently been opened out to some extent by a good road to the nearest railway station, so that they have given up, for the most part, the worst traits of their former life; but below the Ghats one or two tribes still live from hand to mouth, and not very well at best.

The artisans and other non-agricultural classes.

The artisans are proportionately rather more numerous than usual in this Presidency, partly owing to the abundance of cotton, which stimulated the growth of weaving, partly to the particularly complete organisation of the village community as a self-supporting institution in the Maratha country. The ordinary village artisans seem to have shared in the fortunes of their agricultural fellows, and indeed, are themselves to a large extent endowed with a share of the village lands or the produce thereof. The weavers are in rather worse plight, but as there seems no diminution in the strength of the castes thus employed, it is probable that they have taken, as elsewhere, to working into strong hand-made goods the yarn turned out by the Bombay mills. At the same time, it is the case here as in the Madras Presidency, that in an actual famine, not a mere local scarcity, the weaver is one of the first classes to feel the pinch of hunger, and it is worthy of note that the same fact is stated by one of the members of the Governor's Council in the latter Presidency in 1793, just a century ago, and before the newly-developed machine industry of England had had time to materially affect the demands of the population of India for silk and cotton fabrics. Wages are not paid in cash to a very large extent, except in and round the larger towns and railway markets. They have improved considerably in Bombay itself, both in the docks and mills. In the greater part of the rural tract, they are paid in part in food grain, with the addition of some clothing every year, or at the end of harvest, so that their receipts do not vary with prices. Except in a year of famine, then, this class is, on the whole, poor, but not distressed.

Speaking generally, Ratnagiri is the only part of the Presidency where the population really presses on the land, and where the resources of the district do not suffice for the support of its inhabitants, but a portion of the latter has to resort elsewhere for a part of the year. In the more fertile portions of the Presidency there are everywhere certain classes of petty landholders and village menials who make a living but do not save out of their yearly gains. In the Deccan, excluding Khandesh, the uncertainty of the rainfall is the principal factor in the peasant's life, and the experience of the years 1880–90 prove that without special ill-luck, the tract is as prosperous as most of the rest of the country, outside the rice-growing tracts of the great deltas. Unfortunately, however, it is impossible to reckon upon any lengthy succession of good harvests here, and the population is liable, accordingly, to periodical relapse, affecting all classes, agricultural and artisan. The area under non-food crops that yield a good profit, however, is always considerable, so that, in case of need, cotton, sesamum, linseed, and the like, give place to cereals, pulse, or vegetables, and are thus brought into the service of the general population. Industries have, on the whole, increased in value, and the proof is seen in the better houses, better clothes, and more durable and expensive household utensils of the middle classes, whilst the artisan castes seem, if anything, to have increased in their claims to social recognition. The proportion of village menials, whose want of caste *status* precludes them from competition with those above them, is higher than usual, and the forest tribes, too, except within the tracts where they are still in possession of the bulk of the soil, cannot be said to be in any but a low material condition.

## AJMER-MERWARA.

AJMER-MERWARA.

THIS small unit of administration has the ill-fortune to lie almost on the boundary line between the south-west and the northern rain current. It is thus peculiarly liable to failure of harvest and forage, and even, as in 1891–92, of drinking water. The area under irrigation is comparatively small, and as the supply depends on the rainfall, it is of least avail when most wanted. During the year above-mentioned considerable sums were advanced by the State to cultivators for digging or improving wells, and the relief works which it was found advisable to start were mainly tanks and other means of irrigation in a normal season. But the mortality amongst the cattle was large, both from want of forage and water and owing to an unusual prevalence of disease. Out of the 10 years under review, the last four have all been more or less below the average in productiveness, and Merwara, which, during the first six years of the decade, exported considerably more produce than it imported, has since been obliged to fall into the trail of Ajmer, which has been persistently an importing district. At the same time, it appears that the population has increased in the former case by 18⅓ per cent., and by 17½ in Ajmer, and that the registration of the vital statistics, such as it is, shows that to a considerable extent, the increase arises from an excess of births over deaths. The urban population bears a remarkably high proportion in this province, and is over a fifth of the total. It has increased, moreover, at a considerably higher rate than the rest, a fact which to some extent accounts for the growth of the imports. The incidence of the State assessment on occupied land other than privileged is Rupees 1·552 per acre in Ajmer, and, Rs. 2·125 in Merwara. The areable unoccupied land still available for cultivation is clearly of a far lower quality than the above, as the total incidence, including it, is no more than Rs. ·984 and Rs. 1·666 respectively. More than Rx. 10,800 remained over at the end of the year, against Rx. 1,158 the year before. Since the close of the former year, decision has been passed regarding suspension or remission of the outstanding balance.

Detailed information regarding the condition of the people is not available at present, as the Province has been undoubtedly suffering from abnormally short harvests for the last four years or so, and there is no reserve kept that will bridge over such a lengthy period of depression. On the whole, Ajmer, beyond the city, is in a less flourishing condition than its sister district, which has more recently passed into the hands of a settled class of cultivators. There is no doubt as to the great prevalence of indebtedness in the former. Apart from the failure of crops, the caste customs in connection not only with marriage, but with funerals, also, weigh unusually heavily upon the better class of peasantry. Then, again, the tenure of a good deal of Ajmer is that of large proprietors, who let their lightly assessed villages out in estates to tenants at a high rent. Transfers of land, too, are growing more frequent, it is said, and from the high proportion of the trading population, it is presumably into the hands of the money-lender that the estate is falling, with the tenant or occupant kept on a rack-rent, or even as a sort of serf. Here, as elsewhere, the better the credit the higher the debt, and the labourer, though suffering from the scarcity of the grain in which he is paid, is well paid in cash if he resort to the two or three chief towns, which are centres of a brisk trade. Owing to the position of this Province, which is that of a very small *enclave* in the midst of large Native States, and traversed by three or four lines of railway, prices have kept very level during the decade, especially in the bad years, so the cultivator, whilst not securing the best profit for any surplus he may have in a good year, is at least saved from famine rates when, in a bad one, he has to buy from foreign stocks. In Merwara, the condition of the peasant seems to be better, though, as in all semi-reclaimed communities, his tendency to rapid multiplication has brought him within an appreciable distance of the margin of cultivation, considering, that is, the light rainfall, the scarcity of good arable land and means of artificial irrigation. It is to be borne in mind that in 1820 this tract was the centre of all the freebooting that went on in South and Western Rajputana, and that from that date only begins the existence of the Mers as a civilised and law-abiding community. Unfortunately, though the bonds of caste

custom

custom hang looser on this tribe than on the higher classes, the Mer is given to imitate the Rajput in the cost of domestic ceremonial, with the inevitable result of the never-ending loan from the money-lender. The frequent failure of his crops prevents him from liquidating the obligation, even if he tried to do so, though he may manage to escape additional burdens. It appears, however, from the specially good physique of the Mer, that his debts do not encroach upon his supply of necessary victuals, or prevent his multiplication." AJMER-MERWARA.

## COORG.

THIS small province enjoys an abundant and certain rainfall of 136 inches in the northern division, and 70 in the southern. Even during the severe famine in Mysore 15 years ago, the Coorg cultivators were not affected, except by the number of immigrants from the east into this more favoured tract. The hilly and broken country is not suited for farming on a large scale, and agriculture is concentrated, accordingly, on comparatively small areas under rice and coffee, with the special forest cultivation of cardamoms. Towns are few and small. Even the largest is no more than the local market with the addition of the official element attached to the headquarters of the administration. The census shows the urban population to amount to only 8·96 per cent. of the total. There has been a decrease in the latter between 1881 and 1891 of 2·94 per cent., but this is due merely to the accident of the short and early coffee crop of the later year. A large proportion of the Coorg population comes from outside for the plantation work, and returns when this is over. In 1891 the small crop was gathered a month earlier than usual, and to curtail expenses the planters dispensed with their extra hands as soon as possible, so that by the time the census was taken, at the end of February, the harvesters were back in Mysore and Malabar. The detailed returns show that the indigenous population had increased by over 16 per cent., and the Native, or Coorgi-speaking community, by over 22. COORG.

The area under food crops increased by only 1 per cent. between 1882 and 1892, whilst that under other cultivation grew by 29 per cent. Practically the food grown is entirely rice, and the non-food crop is coffee, since the cardamom crop is not included, as it is grown on forest-land. The rice crop fully suffices for the support of the resident population, but grain is imported from Mysore, Malabar and Kanara for the season's immigrants. The natives of Coorg, too, eat a good deal of meat, especially pork. Only in a small tract to the north is the local food supply occasionally insufficent. Here the hills only allow of cultivation here and there of small rice patches, and the rainfall is too heavy for the ordinary autumn crop, so the cultivator trusts to winter sowing, brought up by the spring rains. If the latter be late in coming, there is undoubtedly a month or two of short food supply, but the inhabitants, who are acclimatised, prefer remaining where they are to moving to lands more favourably situated. There is a considerable amount of rice exported from Coorg, and in spite of the local demand valued at from Rx. 1,900 to Rx. 2,700. On the other hand, the imports of food grain are estimated to reach ten times that value. The coffee industry, initiated by European enterprise, has spread throughout the landed class, but its profits are subject to great vicissitudes. For instance, in 1890 the outturn was only 2,130 tons, whilst in 1891, 5,733 tons were exported at Rx. 120 per ton. The value has fluctuated between Rx. 52 and Rx. 90 in the decade. Depressing local causes, such as leaf disease and the borer, have been rife during the last 10 years, but the cultivation is still carried on, and it is stated that almost every Coorg landholder has a few acres under coffee, to which he looks for his wherewithal to purchase luxuries. If this crop fails the land will be replaced under rice. Food Supply.

| Year. | Food. | Non-Food. | Total. |
|---|---|---|---|
| | *Acres.* | *Acres.* | *Acres.* |
| 1882–83 | 74,469 | 48,519 | 122,979 |
| 1891–92 | 75,330 | 62,881 | 138,231 |

The land is held on the direct assessment or raiatwari system, and except the coffee plantations there are few large estates. The average incidence of the State demand is Rupees 2·166 per acre, but a good deal is held on peculiar terms, Tenure, &c.

Coorg.

terms, under which sub-letting and alienation is prohibited, and special obligations of military and police service can be enforced when necessary. This class of land is held at one-half the ordinary rates. During the decade an important step was taken to check the abuse of the privilege of holding a certain area of forest land revenue free, as an appendage to rice-fields, for grazing, leaf-manure, &c. It was found that such lands were frequently either let out for cultivation under coffee or sold to planters. A survey was made, the extent of the abuse ascertained, and assessment imposed on all but what was sufficient for the purpose contemplated in the concession. The cardamom patches are let out on lease for 7, 14 or 21 years. The profits from this produce have been falling of late, owing to competition in Ceylon and the Malabar Coast, and remission of the amounts payable under the terms of the lease has been found necessary to the amount of Rx. 794, out of a demand of Rx. 2,785, on account of the scantiness of the rain in the spring of 1890, which threw the cultivation, or rather the growth, back for a season or two.

| Year. | Value of Cardamom Exports. | Year. | Value of Cardamom Exports. |
|---|---|---|---|
| | *Rx.* | | *Rx.* |
| 1882–83 | 9,632 | 1887–88 | 7,060 |
| 1883–84 | 19,200 | 1888–89 | 6,800 |
| 1884–85 | 15,600 | 1889–90 | 4,800 |
| 1885–86 | 14,500 | 1890–91 | 5,380 |
| 1886–87 | 14,160 | 1891–92 | 4,590 |

Communications and trade, &c.

This Province lies at present outside the railway system of Southern India, but the means of communication by road have been much improved in the last 10 years. The Kavari river has been bridged, and first-class roads opened through the chief tracts. The number of carts that entered and left the Province rose from 46,675 in 1882 to 83,700 in 1892. The returns of their contents are said to be at present in a rudimentary stage, and not to give trustworthy information. The consumption of salt and liquor, however, is known from the central returns to have increased considerably, and the standard of living is stated to have risen in proportion. Silk is used nearly everywhere for sashes, and broad cloth of foreign manufacture is in great favour during the damp seasons.

Indebtedness.

The increasing taste for luxuries is said by the elder native residents to be leading the present generation into debt, and the local officials testify to the growth of the daily dram taken by the inhabitants of all Indian tracts with a rainfall like that of Coorg, into a distinct addiction to excessive drinking. The families who have acquired the taste for better food and clothing, as well as for drink, during a series of prosperous years on the coffee estates, are naturally reluctant to take the necessary backward step when bad luck sets in, and resort at once to the money-lender. Then, again, Coorg has been plagued with cattle disease of late, and as no system of segregation is acceptable to the farmer, he often loses the whole of his stock, and has to borrow to replace it. Where nature has done so much for man as for the Coorgi and Assamese, indolence seems a predominating characteristic, and with wealth grows the neglect of his land, and the performance by hired labour of duties which he used to undertake in person. The prohibition of alienation or sub-letting of privileged lands has restricted his credit to within reasonable bounds, and in many cases the landholder has begun work again on his estate with his own hands. But there remains another cause of indebtedness, still more influential, and that is the continual subdivision of estates to a point which hardly allows the holder to support himself and his family. This is attributed in part to the new value given to land by the introduction of coffee-planting and the connection thus opened with foreign demand ; in part, too, it is due, no doubt to the individualising tendencies of a strong and equitable administration. The partition of estates was a difficulty as far back as 1805, when the Chief used to be requested to sanction it in special cases. The action of the British courts of law magnified the evil, till partition was prohibited in 1858, as being "contrary to the ancient custom of Coorg." Nevertheless, though unrecognised by the law, subdivision by family arrangement is still very prevalent, if not universal, and is one of the great clogs on the progress of the landed classes.

Artisans and labourers.

Migrant labourers are estimated to visit Coorg at the rate of 45,000 to 60,000 a year. Their wages are high, and the planters, as a rule, lodge them, and provide medical attendance, as in Assam. The local labour consists of the reclaimed forest tribes, and the depressed village classes, who confine themselves

themselves to the work in the rice fields. Their wages are paid chiefly in grain, with presents of clothing periodically. The employer too, provides material for housing, and a supply of salt, condiments, and tobacco, &c. Immigrant labourers from the coast, who also engage themselves for the rice harvest. take up the work by contract for cash only, and earn considerably more than the natives of Coorg. The latter do not affect plantation work, even at their own door, though the rate of wages is double that in the rice-fields, because the task imposed has to be performed at hours fixed by the employers not, as elsewhere, by the labourer. The artisan community in Coorg is a very small one. As usual, only the weavers have suffered by foreign competition. A few remain to make the local form of sashes and wrappers required by the lower classes, and the rest are reported to be in trade or to work in the fields. The majority of the artisans are from the coast and Mysore; and only those who make the peculiar Coorgi knife are natives of the Province. Coorg.

On the whole, the local authorities show that whilst there is a favourable climate, plenty of good land, and a thin population, the condition of the agricultural classes is by no means satisfactory. They have thrown a good deal of their land into coffee, a notoriously precarious crop, though highly remunerative in a good season, and the cardamom crop, another source of revenue, is on the wane. Their social customs unduly favour the sub-division of their estates, and their indolence and love of luxury prevent them from successfully resisting circumstances even temporarily adverse. Their present condition, however, is above that of many of their neighbours, and not at all beyond fair hopes of improvement.

## MADRAS.

In the Madras Presidency, as in Bombay, there is in one direction a tract lying on the borderland of the two chief rain-bearing currents, and in another, a considerable area that is practically secured by its natural advantages against famine. But in the eastern portion of the Province is found an intermediate state of things, where a fertile soil and a good rain-fall is accompanied by occasional irregularity of the latter, extremely detrimental to the rice crops by which the population mainly lives. The census of 1891 shows an increase during the ten years of about 15½ per cent, a rate which is probably considerably over the normal. In a former part of this chapter the rapid replenishment of the worst of the famine tract has been noted, and it appears that whilst the increase of population in the rest of the Province has amounted to about 11½ per cent., in the nine districts constituting the famine tract of 1876–78, the rate rises to over 20. It may be noted, too, that except in the districts of Cuddapah and Karnul, and to a very small extent in Salem and Anantapur, the population of 1891 exceeds that returned at the census of 1871, before the great famine. Unfortunately, however, the favourable conditions that, on the whole, were prevalent in this tract between the two enumerations, came to an end about the time the census of 1891 was taken, and since that season, the rainfall has on two occasions been far below the average, so that State measures for relief have been found necessary. It is true that the distress was in no case anything approaching that of fifteen years ago, and that in the first year of partial failure only about 9,300, and in 1891–92, only 47,000 people were attracted to the works opened by the local Government for relief purposes. Nevertheless, the State assessment on land was remitted to the amount of Rx. 231,000, and advances for agricultural purposes were made up to Rx. 71,080. The year before these two unlucky seasons, again, though characterised by a fair harvest in most of the Province, was a bad one in the district of Ganjam, on the north-east coast, where communication with other markets is difficult, so that for some considerable time, during the consumption of the local supply of food, the trading community was able to profit by the misfortunes of the cultivator in a way that is now impossible in most of the rest of India, and will probably be equally a thing of the past in Ganjam by the time the crops fail again. Madras.

MADRAS.

The density of the population is nowhere remarkable, except in Tanjore, where it exceeds 600 to the square mile. But apart from the great fertility of this district and the advantages it enjoys in the way of irrigation, every year, as has been already shown, a considerable number of labourers leave it for a season in Ceylon or the Straits Settlements, and, within the last few years, Tanjore has been following the example of Ganjam in supplying the labour market of Burma. There is thus no pressure on the soil here, and the increase, amounting to 10 per cent. if the temporarary emigrants be included, shows that the supporting power of the land is by no means yet exhausted. In Malabar, again, where there are 475 persons per mile, the pressure is insignificant, owing to the regular rainfall, the large cultivable area, and the variety of crops that can be grown, together with the fact that the fish-eating population is in high ratio there. On the north-east coast, too, much the same conditions prevail, though the season is more uncertain. There is, however, a very large tract lying inland, as yet untouched by the plough. Excluding the latter, and the large area under permanent settlement, for which there are no returns, it appears that over a fifth of the arable area is not yet occupied, and that some 8 million acres are available.

The proportion of urban population is almost exactly that of India as a whole, or 9½ per cent. There are no large towns, except the capital, but the seaports show a remarkable tendency to increase, and now absorb most of the traffic of the Province. The total urban population has not grown at the same rate as the rural, and this is necessarily so, since the chief factor in the latter has been shown above to be the recuperative power of the agricultural classes in the districts deprived of so much of their population by famine.

In dealing with the mass of the people, which, as usual, subsists almost entirely by agriculture, it is necessary to make allowance for the want of information about the cultivation in about a third part of the Province, where the Permanent Settlement prevails, and, as in Bengal, details are not at present furnished to the local Government. The review that follows, accordingly, is mainly restricted to the remaining area, regarding which information has been collected by Mr. S. S. Raghavaiyangar, Inspector General of Registration, in a Memorandum published by the Madras Government in 1892. But in reference to the Zamindari tenure, it is worth while just to mention that there are 15 estates of nearly half a million acres each, 128 of 74,000, and 706 of about 4,000 acres, or 849 in all. The assessment on these properties is about one-third of their rental, or just one half of the proportion it bore to the latter at the time of settlement. The owners do not, as a whole, receive a good character for thrift or beneficial administration of their property, and in this respect resemble the same class all over India. There is also, as in Bombay, a large body of landholders enjoying privileged rates of assessment, or holding at a quit rent. The greater number of these estates are merely small holdings assigned for village service, but about 3,000,000 acres are comprised in whole villages thus held, and, owing to sub-division amongst the grantees, who are mostly non-agriculturalists, such as priests or temple administrators, the value of the property has much diminished, though the State assessment is but 16 per cent. of the rental. Then comes the great body of the cultivating classes, holding direct from the State, of whom there are some 4,600,000, including shareholders. The area held, if the uncultivable and privileged land be excluded, is about equal to that under the zamindars, and of the 28,000,000 of acres in question, 21,000,000 are in occupation. It is worthy of mention that two-thirds of the holdings are assessed at less than Rupees 10, and average but Rs. 4 each, and that nearly a quarter more are assessed at between Rs. 10 and Rs. 30, with an average of Rs. 17. It is thus calculated that about 90 per cent. of the families in the Province have land standing in their names, either held from the State or the zamindar.

Extension of cultivation.

As regards the increase in the area under cultivation, the author of the Memorandum above cited shows that taking identical areas in each year, the area of unirrigated land now held is 33 per cent. in excess of that 40 year ago; that land irrigated from State works has increased by 50 per cent., whilst that brought under private wells, and this is the most significant change of the three,

three, has expanded by no less than 150 per cent. Taking only the period with which the present review is more immediately concerned, the returns show that in 1881–82 the land under cultivation in the villages not held on privileged terms, was only 6 per cent. below the five years' average of the corresponding area before the great famine. In the next year it approached that average more closely, and since then it has advanced beyond it. It is hardly necessary to state that along with the extension of well-cultivation there has been a great increase in the area off which more than one crop is taken in the year. In 1881–82, this area was about 1,219,000 acres; by 1889–90 it had risen to 2,322,000, and to 2,393,000 in the next year. In 1891–92, owing to the want of water, it fell back to 2,164,000. The marginal table gives the areas under some of the chief crops in several years, both bad and good in respect to the harvest. The food-grains and pulse, it will be noticed, cover from 79 to 83 per cent. of the total. Between 1881 and 1890 those crops increased by 21 per cent, the oil-seeds by 109, and the cotton by 33 per cent. The expansion under the first head therefore, is higher in rate than that of the population in the tracts where the increase has been most marked. It is also worth mentioning that in the matter of agricultural stock this Presidency is well abreast of the growth of its cultivation and its people, for the rates of increase during the period just selected were 27 per cent. in cows and 25 per cent. in plough cattle. Buffaloes and small stock, too, increased in still higher proportions. Ploughs, again, are 29 per cent. more numerous than in 1881, and carts, an equally important sign in the condition of the rural classes, are returned as nearly half as numerous again as they were ten years back.

MADRAS

| Crop. | 1881-82. | 1890-91. | 1891-92. |
|---|---|---|---|
| | *Acres.* | *Acres.* | *Acres.* |
| Rice - - - | 5,423,755 | 6,159,628 | 5,771,182 |
| Great Millet - | 3,242,914 | 4,429,084 | 4,667,666 |
| Spiked Millet - | 2,319,824 | 2,746,812 | 2,496,078 |
| Ragi - - | 1,403,250 | 1,639,109 | 1,675,805 |
| *Total Cereals* | *15,377,163* | *18,423,311* | *17,689,818* |
| Pulses - - | 1,561,077 | 2,111,614 | 2,013,29 |
| Oil-seeds - - | 917,002 | 1,918,705 | 1,501,638 |
| Cotton - - | 1,302,537 | 1,737,732 | 1,318,042 |
| *Total Cropped* | *20,648,028* | *26,070,623* | *24,308,292* |
| Twice-cropped | 1,219,616 | 2,393,238 | 2,164,202 |

The area suitable for cultivation that has not yet been taken into occupation is, as above stated, some 8,000,000 acres, not including that in the permanently settled estates in the quit-rent villages, or the Agency tracts that hem in the north coast. In Anantapur, which is, perhaps, the district most subject to failure of crops, there is still an acre per head of arable waste to be got, and the assessment roll shows that it is not inferior in quality to that already in occupation there. In the neighbouring districts it is the same, though on a less pronounced scale. In the Deltas of the Kistna and Godavari there is more land than can be cultivated, and much of it is susceptible of irrigation from the State works on those rivers. In Malabar, too, over a million acres are returned as open to tillage, over and above that already taken up for cultivation or forest. It is clear, therefore, that there is as yet no lack of room for further expansion.

Arable Waste Land.

The mean incidence of the State demand on the cultivable land is returned at Rupees 1·53, or, if that actually in occupation be alone considered, Rs. 1·79, per acre. In this calculation all but the fully assessed land is excluded. The demand on zamindari or other privileged land shows an incidence of about Rs. 0·21, per acre, which is stated to represent a third, a sixth, and a fifth respectively, on the rental value of the estates concerned. The land revenue, which was Rx. 3,400,000 in 1849–50, was Rx. 4,810,000 in 1889–90, and has increased by over 30 per cent. since 1860. The portion derived from the land not under permanent settlement or held on quit rent, amounted to Rx. 3,000,000 in 1852–53. In 20 years it had increased to Rx. 3,760,000, and in 1889–90 was Rx. 4,000,000. The increase due to revised settlements during the 40 years is about Rx. 125,000, but the remissions, reductions, and the abandoned local taxation, together amounted to Rx. 525,000, so that there was a net reduction of Rx. 400,000 in the demand. An increase to this amount in the present demand is attributable to the revenue from State irrigation works, whilst the fact that the occupied area has increased by about 60 per cent., may be held to account for most of the rest. The rate per acre, all round, it may be noted, has decreased from Rs. 1·31 in 1852–53, to Rs. 1·03, in 1889–90. The collection returns, moreover, show,

State Assessment.

MADRAS.

that the burden is a light one, as less than 1 per cent. of the occupied land, and that of the poorest quality, is, on the average, sold in default of payment of assessment. The rise in the prices of agricultural produce, too, has to be taken into consideration in connection with the weight of the incidence. The marginal statement gives the variations in these prices since 1849, and shows that all the main products fetch about double what they did 40 years ago. The last period quoted may be omitted from consideration, as the rise is due to scarcity rather than to more permanent causes. For the same reason, the figures for the famine years and those that immediately followed them are omitted. On the whole, in an averagely favourable year, the occupant has to dispose of no more than half the amount of his produce to pay his assessment that he had to assign for the purpose at the beginning of the period under comparison.

Prices.

| Period. | Rice. | Great Millet. | Spiked Millet. | Ragi. |
|---|---|---|---|---|
| 1849–53 | 100 | 100 | 100 | 100 |
| 1861–65 | 264 | 227 | 227 | 233 |
| 1870–74 | 216 | 182 | 185 | 180 |
| 1884–88 | 234 | 189 | 200 | 192 |
| 1889–92 | 287 | 261 | 265 | 248 |

The rental and the selling price of land is also a valuable indication of the estimation in which landed property under the ordinary raiatwari tenure in this province is held. The analysis of a considerable number of transactions in the Coimbatore district, which is selected as representing a fair average of the Presidency as a whole, shows that unirrigated land is let as a rule at four times the assessment, and in some ten per cent of the cases examined, the rent rose to ten times and over. Rice land fetched about five times, and garden land about six, with about a quarter of the cases concerned held at more than ten times the State demand on it. Similar inquiries in other districts testify to the same tendency of the rental to largely exceed the assessment, and in connection with this point it is found that, in most of the cases quoted, the latter is paid by the lessor. As to the selling value of land, the returns of registration in the fertile district of Tanjore yield the rates per acre of rice land noted in the margin. In Tinnevelli, in the extreme south of the Province, land sold for Rx. 33 in 1865, fetched Rx. 110, in 1890. Another plot that went for Rx. 5 in 1874, realized Rx. 26 in 1882. Going back to Coimbatore, we find a case in which seven acres fetched Rx. 35 in 1855, and 21 years afterwards three acres of it were sold for Rx. 130. The mean selling rate for the district ten years ago was Rs. 20·5 for dry unirrigated land, and Rs. 266 for rice, whilst the average assessment on each was Rupees. 0·927 and 7·437 respectively. Not to multiply instances, the case of the least prosperous district, Anantapur, may be taken, where the average selling value of the land is Rupees. 10 for dry, and 47 for wet. The assessment is, on the average, only Rs. 0·625 per acre. It is thus clear that the market value of land in most, if not in all, parts of the Province, is far above what it was in the last generation, and before that time it is doubtful if it was appreciable, so weak was the demand. The great increase in the number of wells, too, shows in what light it is regarded as an investment, and materially adds to the material resources of the dry tract in which they are becoming comparatively common.

| Year. | Price per Acre. |
|---|---|
| | Rx. |
| 1863–65 | 3·9 |
| 1868–69 | 15·1 |
| 1870–71 | 14·8 |
| 1873–74 | 14·6 |
| 1876–77 | 18·0 |
| 1877–78 | 17·2 |

Communications.

In this Presidency the improvement in the way of communication has been very marked since 1852, when there were only some 3,000 miles of cleared road. There are now about 25,000 miles, with 1,900 miles of railway and 1,500 of canal. The railway alone carried in 1891–2 over 18¼ millions of passengers and about 3 million tons of goods. In times of distress this change has produced the same results as have been noted already with reference to other parts of the country, namely, the steadiness of the grain-market and the general control exercised over it by the supplies in distant provinces. In 1833, for instance, prices were normal in Malabar, whilst they reached the highest rate ever known in Cuddapah, and, to a smaller extent, the same may be said regarding the 1876-78 distress here and in the outlying parts of the Central Provinces. There is another noteworthy point in connection with the extension of roads, especially those which act as feeders to a railway, and this is, the stimulus given to the employment of plough-cattle and the ordinary agricultural cart in traffic to and from a station at times when neither cattle or driver are wanted in the fields. The number of landholders who thus eke out their living is very large, and to this practice may be attributed

attributed a good deal of the increase in the number of carts, from 90,000 in 1850 to five times the number in 1890. The sea-borne trade, too, has increased very largely, though the whole of the growth is not due to the larger production or demand in the Presidency itself, because the large states of Haidrabad and Mysore indent a good deal on it for carriage. If both foreign and coasting trade be taken together, the value of the Madras trade rose from Rx. 4·66 millions in 1850, to Rx. 29·6, in 1890 and a very substantial portion of the component commodities must be assigned to Madras, especially since the railway service between Bombay and Haidrabad and Mysore has been improved. MADRAS.

Agricultural labour seems to be paid in kind almost throughout the Province, but the rate of remuneration varies more than usual according to the social position of the wage-receiver. The poorer members of the regular landholding castes, for instance, who have no estate of their own, or who labour for only a portion of the year, are paid at a higher rate than the village menial, or the depressed castes, who were, till within a comparatively recent period, the agrestic serfs of the rest, and who cannot by social convention be employed inside the house or in attendance on cattle. The general condition of these classes is much the same, in respect to wages, as it was twenty years ago, but the field of employment is wider, and many leave their village for work in the towns and on railways. Observers generally remark upon the comparatively stalwart and healthy appearance of the lower classes in Madras, and two facts seem to indicate that the case of the latter is not a hard one. First, their numbers increase quite in proportion to those of the rest of the community; and, then, when there is any really severe task-work to be done, as in the construction of railway embankments or canals, it is said to be difficult to procure any local labour, even when the demand in the fields is not at its height. In the works on the East Coast line and Delta canals, indeed, the bulk of the wages go, it is said, to labourers who have come voluntarily from the Deccan and Panjab, which are brought within reach by the new lines, and such men, as in England, acquire the special efficiency that ensures them continuous engagements. It may be noted, too, in connection with the question of the lower classes in Madras, that they are particularly free from prejudice in the matter of food. The fish supply along the coast is abundant, and the palms of various kinds provide plenty of drink at a cheap rate. In the towns, where cash wages are customary, the rate is about half as high again as that in the rural tracts where grain rates rule, but it does not appear that there has been any considerable rise of late years, except amongst domestic servants and the skilled labourers in mills and other industries. The fact that labour is fairly constant along the railways or at the seaports seems to attract a certain amount of competition which possibly keeps down the rates in the lower grades of employment. The Labouring Classes.

Compared with what was recorded about the condition of the people in general at the time the various parts of the Province came under British administration, there has been beyond a doubt a great change for the better amongst the masses. Sir Thomas Munroe testifies to the uncertainty amongst the cultivating classes every year as to whether a man would be a landholder or a labourer the next season, as the estates were thrown up from inability to cultivate after a bad season or two; and along the eastern coast, it was said, a man was obliged to resort to the moneylender every year, as a regular practice, and paying interest from 24 per cent. upwards, according to his credit. Native writers on the subject specially take note of the higher material standard of living that is now prevalent. Houses are being tiled and terraced; women's clothing is finer and more costly, metal vessels are usual, even in the house of the labourer, and rice is eaten where millets were formerly the only cereals that entered the house; ornaments, in spite of the remarkable revelations of the famine, have by no means been swept out of the country through the agency of the pawnbroking shopkeeper, and are reported to be more in evidence on public occasions than ever. One writer talks of the "mania for making jewels" that is now common. The strong physique of the lower classes has been already mentioned, and it is curious that this is more noticed in connection with the dryer and less favoured

MADRAS. tracts than the fertile rice-fields of the coasts. No special mention is made in the review on which these comments are based of the indebtedness of the cultivating classes, but the writer is no doubt right in taking a certain amount of debt to be in Madras, as in all other Provinces, an inevitable accompaniment to agricultural existence. There is one feature in the economy of the people in this respect that is brought out in the Census returns, and that is the sparsity of the foreign element amongst the trading and money-lending classes, compared to what it is in the neighbouring Presidency. It is probable, therefore, that the transactions incident to marriages, failure of crops, or loss of cattle, are carried on between men of the same race, and possibly settled in the place where they trade, instead of necessitating recourse to an alien whose interest lies beyond that of the community to which he ministers.

Artisans. The artisan class is said to be a flourishing one in this Province, always with the exception of the unlucky weaver. The general development noticed above of a higher standard of living gives plenty of employment to the worker in wood and metals, and, with the restriction placed by caste on the exercise of these industries competition operates but mildly. In the case of the weavers, the present competition is not with the foreigner alone but also with their own fellow-countrymen in Bombay. There are still, however, several sorts of goods for which the demand is as brisk as ever, and which cannot be turned out by the large factories as efficiently as by the hand-worker. The women's clothes of the most favourite pattern are made locally, so are the thick wrappers used in the Deccan tracts. But, on the whole, the weaving industry, though perhaps less affected here than in some other parts of India, is certainly depressed. It is a question, on the other hand, whether this has not been its normal condition since the end of last century. In 1793, as has been already mentioned, one of the members of the Madras Council writes that the first class to be affected by the famine of that year was that of the weavers, and this is in exact accordance with the experience of the famine of 1876–78. What happened in India then and is going on still, is much what the English weavers went through at the end of last century and many years afterwards.

Summing up the conditions in the Madras Presidency, it appears that the population is in a prosperous state in every tract in which the agricultural circumstances are regulated by a fairly assured rainfall, but that in the large tract in which the season is notably precarious, a series, more or less long, of good or average harvests, is apt to bring up the population in line with the rest only to result in serious retrogression, due to a succession of losses. The effects of the failure of crops have been much mitigated by the improved means of communications, and by the increase of well-irrigation failure has been to some extent prevented, but the natural disadvantages of the tract in question are such that the class of agriculturists depending upon the current harvest for their support is abnormally large in proportion to the population as a whole. There is abundance of good arable land, both here and in most of the more densely-peopled tracts. Where there is less, the means of irrigation are within reach, so that the same result is obtained as from the territorial expansion of the population. In the zone of uncertain rainfall, however, the conditions are adverse to use being made of such advantages. As in the Bombay Deccan, the causes that retard the general diffusion of comfort and the maintenance of a higher standard of living throughout the community, are not so much social as physical.

# STATEMENT

EXHIBITING THE

# MORAL AND MATERIAL PROGRESS AND CONDITION

OF

# INDIA

## DURING THE YEAR 1892-93.

TWENTY-NINTH NUMBER.

*(PRESENTED PURSUANT TO ACT OF PARLIAMENT.)*

*Ordered, by* The House of Commons, *to be Printed,*
4 *July* 1894.

LONDON:
PRINTED FOR HER MAJESTY'S STATIONERY OFFICE,
BY EYRE AND SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

And to be purchased, either directly or through any Bookseller, from
EYRE AND SPOTTISWOODE, East Harding Street, Fleet Street, E.C.,
and 32, Abingdon Street, Westminster, S.W.; or
JOHN MENZIES & Co., 12, Hanover Street, Edinburgh, and
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India Office,
2 July 1894.

*A. Godley,*
Under Secretary of State for India.

# I.

## ADMINISTRATION AND LEGISLATION.

ADMINISTRATION.

In the Home Administration the Right Honourable Viscount Cross, G.C.B., continued to be Secretary of State until the 19th of August, when the Right Honourable the Earl of Kimberley, K.G., assumed charge of the office. Mr. Arthur Godley, C.B. (now Sir Arthur Godley, K.C.B.), continued to be Permanent Under Secretary of State throughout the year. The Honourable George N. Curzon, M.P., remained in office as Parliamentary Under Secretary of State, until succeeded on the 19th August by Mr. George W. E. Russell, M.P. There were no changes in the Council of India.

The Marquis of Lansdowne, G.M.S.I., G.C.M.G., G.M.I.E., continued to be Governor General of India during the year. On the 7th April Sir Charles Crosthwaite, K.C.S.I., entered upon the office of Ordinary Member of the Council of the Governor General, to which he had been re-appointed, in place of Colonel Robert C. B. Pemberton, R.E., a Temporary Member of the Council. On the 28th of November Sir Charles Crosthwaite succeeded to the office of Lieutenant Governor of the North Western Provinces and Chief Commissioner of Oudh, and his place in the Council was taken by Sir Charles Pritchard, C.S.I., K.C.I.E. There were no other changes in the constitution of the Council of the Governor General.

Bengal.

Sir Charles Elliott, K.C.S.I., was Lieutenant Governor of Bengal throughout the year.

North Western Provinces and Oudh.

Sir Auckland Colvin, K.C.M.G., K.C.S.I., C.I.E., continued to be Lieutenant Governor of the North Western Provinces and Chief Commissioner of Oudh until the 28th of November, when he was succeeded by Sir Charles Crosthwaite, K.C.S.I.

Punjab.

Sir Dennis Fitzpatrick, K.C.S.I., continued to be Lieutenant Governor of the Punjab throughout the year.

Burma.

Sir Alexander Mackenzie, K.C.S.I., continued to be Chief Commissioner of Burma until the 14th of May, when he obtained furlough out of India. In his absence, Mr. Frederick W. R. Fryer, C.S.I., was appointed to officiate as Chief Commissioner.

Central Provinces.

Sir Antony MacDonnell, K.C.S.I., continued to be Chief Commissioner of the Central Provinces.

Assam.

Mr. William E. Ward, C.S.I., continued to be Chief Commissioner of Assam.

Ajmere-Merwara.

Colonel George H. Trevor, C.S.I., continued to be Chief Commissioner of Ajmere-Merwara during the year.

Coorg and Bangalore.

General Sir Harry N. Prendergast, K.C.B., V.C., officiated as Chief Commissioner of Coorg and Resident at Bangalore until the 16th of April, when Colonel Philip D. Henderson, C.S.I., was appointed to the office.

Madras.

The Right Honourable Lord Wenlock, G.C.I.E., continued to be Governor of Madras; Lieutenant General Sir James Dormer, K.C.B., to be Commander in Chief and second in Council; and Sir Henry Stokes, K.C.S.I., and Mr. John H. Garstin, C.S.I., to be Senior and Second Civil Members of Council, respectively, throughout the year.

Bombay.

The Right Honourable Lord Harris, G.C.I.E., continued to be Governor of Bombay during the year; and Sir George R. Greaves, K.C.B., K.C.M.G., to be Commander in Chief. Sir Raymond West, K.C.I.E., continued to be Third Member of Council until the 23rd of April, when his place was taken by Sir Charles Pritchard, K.C.I.E., C.S.I., and Mr. Herbert M. Birdwood succeeded Sir Charles Pritchard as Fourth Member. On the 16th of November Mr. Arthur C. Trevor took his seat as Fourth Member, a vacancy in the Council having been caused by the appointment of Sir Charles Pritchard as an Ordinary Member of the Council of the Governor General.

## LEGISLATION.

LEGISLATION.

During the year 1892 the Indian Councils Act of 1861 was amended by Act 55 & 56 Vict. c. 14, which enabled the Governments in India to make considerable additions to their Legislative Councils, and introduced for the first time the principle of popular representation into those Councils. In the exercise of the powers thus conferred on them, the Government of India and the Governments of the various provinces have made rules for, and have proceeded with, the nomination of additional members of their Councils. But, in some cases these measures were not taken till after the end of the year with which this Statement deals, the account of them is deferred until the next number.

In the year 1892–93 twelve Acts passed by the Council of the Governor General for making laws and regulations received the assent of the Governor General. The first meeting of the Council at Simla was held on the 28th July, and the last on the 20th October. The Council reassembled at Calcutta on the 12th January 1893.

Of the Acts passed, the most important were Act IX. of 1892, which provided for the administration by head-men of towns in Lower Burma; Act IV. of 1893, which empowers the Courts in certain circumstances to effect the partition of estates by sale and distribution of the proceeds, instead of by actual division; and Act VII. of 1893, which made some important amendments in the Inland Emigration Act of 1882.

No Acts passed by the Council of the Lieutenant Governor of Bengal received the assent of the Governor General during the year under review.

Three Acts were passed by the Council of the Lieutenant Governor of the North Western Provinces and Oudh, and received the assent of the Governor General, providing, respectively, for the regulation of lodging-houses in municipalities, for village sanitation, and for the constitution of Village Courts.

Two Acts, viz., an Act to amend the City of Madras Municipal Act, and an Act to repeal certain obsolete enactments, were passed by the Madras Council, and assented to by the Governor General.

Three Acts were passed by the Bombay Council, and received the assent of the Governor General, viz., the Bombay District Vaccination Act, and Acts to amend the Bombay Salt Act and the Bombay Abkari Act respectively.

## CHAPTER II.

## LOCAL SELF-GOVERNMENT, MUNICIPALITIES, AND SANITATION.

Local Self-Government, Municipalities, and Sanitation.

In every province of India a great deal of local business is done, considerable funds are raised and spent, and valuable service to the public is performed, by local bodies which are constituted and exercise their functions under different enactments. Municipal committees exist in most towns of the Indian Empire, and have charge of municipal business generally, including the care and superintendence of streets, roads, water supply, education, hospitals, and police. The number of such committees in each province is given in the body of this chapter. Local and district boards have charge of local roads, sanitary works, schools, hospitals, and dispensaries in rural districts. Bodies of port trustees have charge of harbour works, port approaches and pilotage. There are, besides, less numerous local bodies discharging similar duties in towns, other than constituted municipalities, and in cantonments. The importance of the work of local administration performed by these various authorities is best shown by a statement of the funds at their disposal. The income of the municipalities for 1892–93, apart from loans obtained for special works, was Rx. 3,496,922. The sources of this income and the yield of each source are shown in the Table on page 18. Figures are not available for an exact statement of the revenue enjoyed by the local and district boards during the year; but the chief source of income, the local cess levied on land "for expenditure on roads, schools, hospitals, and general purposes," gave a gross yield of Rx. 2,058,273; and among other sources of income belonging to the local boards are tolls on ferries and roads, school fees, the rent of corporate property, and the grants made by Government for educational and medical purposes. The educational grant in 1892–93 was Rx. 1,434,234, and the medical grant was Rx. 926,165; a great part of these sums is administered by local boards.

The port funds, under the management of port trustees and other local bodies, amounted in 1892–93 to Rx. 1,161,794.

Cantonment funds amounted to Rx. 193,705; and town and bazaar funds to Rx. 80,394.

Thus, the revenue from all sources managed by the various local bodies amounts to more than Rx. 9,000,000; of which amount less than half is shown in the Accounts of the Government of India and in the financial section and appendix of this Statement, founded thereon.

## MUNICIPALITIES.

Municipalities. General.

Throughout India the cities and larger towns manage their own local affairs through the agency of commissioners or committees appointed from among the citizens. The municipal bodies exist, raise funds, and exercise powers under enactments which provide separately for the special requirements of each province, and of the three presidency capitals, Bombay, Calcutta, and Madras. In most places the majority of the commissioners or committees are elected by the townsfolk under legal rules, but in every town some, and in some minor towns all, are appointed by the Government; and in almost every municipal body one or more Government officials sit as members; the number of Indian and non-official members, however, everywhere exceeds the number of Europeans and officials. The municipal bodies are subject to the control of the Government in so far that no new tax can be imposed, no loan can be raised, no work costing more than a definite sum can be undertaken, and no serious departure from the sanctioned budget for the year can be made, without the previous sanction of the Government; and no rules or bye-laws can be enforced without similar sanction and full publication.

The sources of municipal revenue are mainly:—

| | |
|---|---|
| House tax, | Water rates, |
| Tax on rentals, | Conservancy rates, |
| Octroi duties, | Rents of public lands and properties, |
| Bazaar or market rents, | Public gardens and parks. |
| Carriage tax, | |

MUNICIPALITIES. The objects on which municipal funds can be spent are, mainly, water supply, hospitals and dispensaries, streets and roads, vaccination, drainage, sanitation and education. Municipalities do more for the benefit of their citizens under these heads than was done before by Government officers; and the commissioners or committees generally evince diligence and public spirit in the performance of their honorary duties. The interest in the municipal elections, and in municipal affairs generally, has in some places slackened; but for the most part, as education and knowledge advance, interest in the management of local affairs gradually increases. It is reported from most provinces that municipal work is fairly well done, and municipal responsibilities are on the whole faithfully discharged, though occasional shortcomings and failures occur in particular towns. The tendency of these local bodies is to be slow in incurring new expenditure; and they are generally unwilling to impose new taxes even for purposes that are in themselves beneficial. Many members of municipal bodies are diligent in their attendance to work, whether at meetings for business or on benches for decision of petty criminal cases. The more important totals of municipal statistics for British India for 1892–93 were—

| | | |
|---|---|---|
| Number of municipal towns | | 761 |
| Total population of ditto as per census of 1881 | | 15,024,308 |
| Total income of ditto inclusive of loans | Rx. | 4,220,561 |
| Total expenditure of ditto | „ | 4,013,696 |
| Yield of octroi duties | „ | 804,450 |
| Yield of direct taxes, or imposts other than octroi | „ | 1,440,045 |
| Amount of loans credited in the income of the year | „ | 1,184,547 |

Bengal. Calcutta. The Calcutta Municipality consists of 75 commissioners, of whom 50 are elected and 25 nominated. The executive consists of a general committee of 18, seven standing committees, and a number of special committees which are appointed as occasion arises. The various bodies held 231 meetings during the year, at which the average attendance was 57 per cent. of the respective members. The average attendance of the elected commissioners was 14 per cent. higher than that of the nominated commissioners. The income of the municipality during the year was Rx. 430,043, the chief items being Rates, Rx. 331,199, and Taxes on Professions, &c., Rx. 53,661. The expenditure of the year was Rx. 436,363. The total debt of the city is Rx. 2,300,611. During the year there was paid off Rx. 23,305. The stock commands a high price in the market. The income is likely to increase considerably owing to the re-assessment which is continually going on in the city.

Satisfactory progress was made with some important public undertakings during the year. The Harrison and the Lansdowne roads were completed, the water supply was improved by the construction of two new settling tanks to hold 48,000,000 gallons, and a flushing reservoir holding 300,000 gallons was constructed in connection with the drainage system near the Bhawanipur pumping station. The drainage system of the town is virtually completed. The total daily water supply is now more than 24,000,000 gallons, of which more than 20,000,000 gallons are filtered. The municipality is still very backward in its contributions towards education.

The opinion of the local government on the work of the year was that "the commissioners, as a whole, displayed a care and attention to their duties which were very meritorious, and in some cases rose to the level of devotion." A want of vigour in certain executive matters is, however, noticed, especially in the collection of the rates.

Bengal. Interior of Province. In the interior of Bengal there were 146 municipalities, one small new one having been established at the beginning of the year. The population living within municipal limits was 2,731,182 persons, or 3·9 per cent. of the whole population of Bengal, excluding Calcutta. The number of ratepayers entitled to vote at municipal elections was 464,800, or one in six of the municipal population. The municipalities varied in size, from Patna with 167,000 inhabitants, and Howrah with 116,000, to Nalchiti in Backergunge with 1,675; the majority, however, had populations of between 5,000 and 15,000 inhabitants. In 118 of the 146 municipalities two-thirds of the commissioners are elected by the ratepayers, in the rest the government, in consequence either of the backwardness of the locality or of the intensity of party feeling, exercises the power of nomination. In two municipalities, general elections took place during the year, and in each case there were fourteen candidates

candidates for eight seats. There were 88 bye-elections, of which 43 were uncontested and two failed altogether; in the one case because no candidate was nominated in time, and in the other because of the non-attendance of voters. Of the 2,139 commissioners there were 1,158 elected and 981 nominated, 369 officials and 1,770 non-officials, 1,946 Indians and 193 Europeans. Among the non-official commissioners were included 481 zamindars, 508 pleaders and law agents, and 270 merchants and money-lenders. MUNICIPALITIES.

The number of meetings held during the year showed a general improvement on the preceding year. In 40 municipalities more than 20 meetings were held, as against 37 in 1891-92; in only 15, as against 22 in 1891-92, were there less than the prescribed minimum of one in each month. The attendance was unequal; in only 86 out of the 146 was it on the average more than 50 per cent. of the members, in three it was less than 10 per cent. The amount and nature of the business done is best seen from the figures, which show how the municipal funds were collected and expended. Exclusive of extraordinary and debt account the total income was $28\frac{7}{10}$ lakhs, of which $21\frac{3}{4}$ lakhs came from municipal taxation, and nearly 3 lakhs from municipal property and powers apart from taxation. The total expenditure was $28\frac{9}{10}$ lakhs. The chief heads of outlay were: administration $3\frac{2}{5}$ lakhs, public safety (fire establishments, lighting, police, &c.) 2 lakhs, water supply $2\frac{1}{6}$, drainage 1, conservancy $8\frac{2}{5}$, hospitals and dispensaries $2\frac{3}{4}$, education $1\frac{1}{3}$. There was a closing balance to the credit of the municipalities of $4\frac{1}{8}$ lakhs. The most noteworthy feature of the year's accounts is the great increase (amounting to 141 per cent.) in the amount spent on water-works. In nearly all the divisions of the Province the municipalities have made greater efforts than in preceding years to procure a much-needed increase in the supply. Improvements in drainage are rendered difficult by the absence of professional supervision and the want of funds to carry out comprehensive schemes. In some large towns, however, considerable sums have been spent under this head, and levels have been taken preliminary to the preparation of satisfactory schemes. In various parts of Bengal the expense of medical and other public establishments, which would otherwise have had to be provided, if at all, by the municipalities, has been met by the kindness of native gentlemen.

North-West Provinces and Oudh.

The number of municipalities in the North-West Provinces and Oudh was 103, being the same as in the previous year. In all but seven of these towns the majority of the members of municipal boards are elected by the ratepayers, who amount to about 1·7 per cent. of the municipal population of 3,267,999. Elections were held in 68 municipalities during the year, the proportion of the electorate that went to the poll ranged from 16 to 87 per cent. In 97 towns the municipal boards elected their own chairman, but in only six cases did they choose non-officials. The total number of municipal members was 1,562, divided thus:—

| | | |
|---|---|---|
| Elected - - 1,248 | Non-officials - 1,268 | Indians - - 1,403 |
| Nominated or *ex-officio* 314 | Officials - - 294 | Europeans - 159 |

Each municipality held, on the average, 20 general meetings in the year; eight held 30 meetings and over. For all the municipalities of the province the average attendance of members at each meeting was 54 per cent.; in one town, Káshipur, the average attendance at each meeting reached 80 per cent., and in one it fell as low as 40 per cent. of the total members. Most municipalities have provided themselves with bye-laws, which are carefully revised from time to time.

The chief source of municipal taxation is the octroi duty, which is in force in 83 towns, and yielded Rx. 219,847; while other taxes yielded Rx. 44,228; Rx. 75,000 accrued from rents and miscellaneous sources. The incidence of income from taxation was $12\frac{5}{6}$ annas (over three-quarters of a rupee) per head of the municipal population. The total municipal income of the year was Rx. 369,500, besides Rx. 122,035 borrowed from Government, for works of water supply and drainage. Out of the normal expenditure of Rx. 500,000, 45 per cent. was devoted to conservancy, hospitals, drainage, streets, roads, public works, and other objects for promoting the public health and convenience; $3\frac{1}{2}$ per cent. was spent on education, $13\frac{1}{2}$ per cent. on police, lighting, and fire establishments.

MUNICIPALITIES.

The towns which spent most on water supply, drainage, and public works during the year were Cawnpore, Rx. 87,000; Benares, Rx. 70,000; Lucknow, Rx. 25,000; Agra, Rx. 16,000, and Allahabad, Rx. 14,500. In Cawnpore the foundation stone of the new waterworks was laid by Sir Auckland Colvin in March 1892, and in 1892–93 Rx. 30,000 was taken as a loan from the Government towards their erection. In Benares the waterworks, which have cost Rx. 255,822, were completed and opened in November 1892, and are working excellently; the contract for the new drainage works was given out and operations were begun during the year; the estimated cost of the project is Rx. 190,000. In Naini Tal and Mussoorie important waterworks and drainage works are rapidly approaching completion.

The local government is of opinion that on the whole the result of the year's working was good, and that the progress made with sanitation in the large cities was marked.

Punjab.

The number of municipalities in the Punjab was 149, containing a population of 2,014,833, and during the year four small towns were given a modified form of municipal administration without being constituted as municipalities. On 110 municipal committees, two-thirds or more of the members are chosen by the ratepayers, in 11 all the members are *ex-officio* or nominated, in one town the deputy commissioner of the district exercises the power of a committee. The total number of members on all the committees was 1,657, divided thus:—

| | | | |
|---|---|---|---|
| Non-official - - - | 1,342 | Indians - - - - | 1,529 |
| Official - - - - | 315 | Europeans or Eurasians - | 128 |

Elections were held during the year in several considerable towns, such as Delhi, Simla, Ferozepore, Amritsar, Mooltan, Rawal Pindi. In most cases a fair amount of interest was displayed. In Delhi there voted for two contested seats 144 out of 255 persons entitled to do so. In Amritsar 85 per cent. of the voting papers issued at the general election were utilised. At Ludhiana more than half the voters polled. In 47 towns the committees failed to hold the minumum of 12 meetings as prescribed by law. Standing sub-committees have been appointed in all but the smallest municipalities, and have been found to afford great assistance to the general committees. The working of the committees was reported to be generally satisfactory in all the divisions.

The chief municipal tax was the octroi, which yielded Rx. 257,611 in 145 towns, while the other taxes produced Rx. 18,952; the incidence of the total revenue from taxation was about $1\frac{3}{5}$ rupees per head of the population; the yield of taxation was about 4 per cent. below the total of the preceding year, which was one of unusual prosperity. The total municipal income of the year from all sources was Rx. 446,756, of which Rx. 62,373 was from loans and other extraordinary sources; and the expenditure was Rx. 449,797, out of which Rx. 221,521 were devoted to conservancy, waterworks, hospitals, buildings, roads, and other objects for promoting the public health and convenience; 14 per cent., Rx. 53,365, were spent on education, and Rx. 63,207 on fire, lighting, and police establishments, and other ways of promoting the public safety. The liabilities of the municipalities at the end of the year were Rx. 363,214, of which Rx. 342,914 was owing to Government. The loans had been raised for waterworks, sewerage, and protection against inundation.

Burma.

The number of municipalities in Lower Burma was 25, as in the previous year, and they contained a total population of 513,365. In 39 of these towns a majority of the municipal members are elected by the ratepayers, in 2 rather less than half are elected, in 14 all the members hold their position either *ex-officio* or by special nomination. The decision in the case of each municipality, as to whether the method of election or that of nomination shall be adopted, rests with the local government. There are in all 322 members on the several committees, divided thus:—

| | | | | | |
|---|---|---|---|---|---|
| Elected - - | 105 | Non-officials - | 240 | Asiatics - - | 240 |
| *Ex-officio* and nominated. | 217 | Officials - - | 82 | Europeans - | 82 |

Several

Several elections were held during the year. The provincial report mentions that in the important towns of Moulmein, Akyab, and Pegu little interest was aroused. MUNICIPALITIES.

The chief sources of municipal taxation are the rates on the annual value of houses and lands, yielding Rx. 45,728 out of the total income from taxation of Rx. 87,346; water rates yielding Rx. 16,678, and conservancy rates Rx. 13,598. The other chief sources of municipal revenue were municipal property and powers, apart from taxation, Rx. 79,410, provincial and other grants and contributions Rs. 44,487. The total income of the year, apart from loans and debt account was Rx. 229,459. The receipts under the head Extraordinary and Debt amounted to Rx. 36,233. The total expenditure of the year, apart from the debt account, was Rx. 212,337, of which the chief items were Rx. 141,577 spent on water supply, drainage works, conservancy, hospitals, vaccination, markets, slaughter-houses, pounds, registration, public works, and other objects for the promotion of the public health and convenience, and Rx. 16,212 spent on public instruction. The expenditure that came under debt accounts was Rx. 44,409.

In Rangoon the Shone sewage system has been further extended during the year, and arrangements have been made for reclaiming the low-lying area at the east of the town, and for improving and increasing the water supply. In some, especially of the smaller municipalities, education and sanitation are not yet making satisfactory progress. Besides municipalities there are ten other places in Lower Burma where town funds are raised, the amount during the present year being Rx. 21,746, and are managed by committees nominated from among the townsfolk.

The number of municipalities in Upper Burma fell from 16 to 15; Mandalay, Myingyan, Pakokku, Salin, and Pyinmana are the only towns that contain a population of over 10,000. The total municipal population is 326,802, of whom 188,815 belong to Mandalay. The total number of members of municipal committees is 189, of whom 86 are non-officials and 103 are officials, while 124 are Asiatics, and 65 are Europeans. All the members are nominated, none are elected.

The total income of all municipalities in Upper Burma, apart from extraordinary and debt account was Rx. 66,382, of which Rx. 42,967 pertained to Mandalay. The total ordinary expenditure was Rx. 64,024. Public health and convenience (including the same items as in the accounts of Lower Burma) cost Rx 38,540, public safety (fire brigade, lighting, and police) Rx. 14,046, and public instruction Rx. 617.

The number of municipalities in the Central Provinces was 56, as in the preceding year; but orders for the closing of one had been issued in 1892, and similar orders for the closing of another that could not meet its engagements were sanctioned and carried out shortly after the close of the year under report. A majority of the members of all committees, except three, are elected; out of 629 members on all committees, 440 were elected, 184 were nominated, and 5 held their position *ex-officio*; 149 were officials, and 480 non-officials; 51 were Europeans, and 578 were natives of India. A fair amount of interest was shown in most elections, and a considerable proportion of voters went to the poll. The chief exception was in the municipality of Nagpur, where the old members of the committee retained their seats, having won the confidence of their fellow-citizens by work of which the Local Government speaks in terms of high praise. The total municipal receipts of the year were Rx. 124,404, of which Rx. 73,364 accrued from octroi duties. The total income, apart from loans, was Rx. 20,000 below similar receipts in the previous year. The falling off was all under the head of octroi duties. The total municipal expenditure was Rx. 145,969, or Rx. 21,000 more than in the preceding year. The expenditure on waterworks was Rx. 39,000; on schools and colleges Rx. 10,000; on dispensaries and hospitals Rx. 10,000. All these items of expenditure show a substantial increase when compared with the figures for the preceding year. But there are still many municipalities with balances so large that the Local Government suggests to them the advisability of either spending more freely on useful public works, or else reducing their taxation. Central Provinces.

MUNICIPALITIES. Assam.

The number of municipal bodies in Assam was 12, as in the preceding year, of these three were first class, and three were second class municipalities, three were stations, and three were unions.

The total income of the 12 towns fell from Rx. 15,611 to Rx. 15,403, of which Rx. 8,728 accrued from taxation. The two chief items of taxation were Rx. 3,754 from rates on houses, &c., and Rx. 2,471 from tolls on roads and ferries. Among the other receipts, the larger items were Rx. 1,580 from grants, and Rx. 1,518 from markets and slaughter-houses. The incidence of municipal taxation was R. 1. 2. 6. per head of the population. The total expenditure was Rx. 15,291, of which the chief items were Rx. 7,714 on medical institutions, conservancy, drainage, and water supply, and Rx. 3,714 on roads, markets, and buildings.

Madras. Madras City.

In the municipality of Madras there are 34 members, of whom 25 are elected by 4,560 ratepayers. There was no general election during the year, and the three bye elections were all uncontested. The names on the roll of qualified voters form a little more than 1 per cent. of the total inhabitants of the city. At 21 meetings of the Commissioners, the average attendance of members was 12; nine members attended less than 10 meetings during the year; and six members lost their seats by absenting themselves from three consecutive general meetings. The total income of the year, apart from loans, was Rx. 136,947, or Rx. 3,587 more than in the preceding year; of the year's total, Rx. 108,499 accrued from taxation, which fell on the population at the rate of 2⅜ rupees per head; the principal tax is one of 10 per cent. on houses and lands. The only new tax levied during the year was a duty on tobacco, which was imposed in July 1892, and in the nine months from then to the end of the official year brought in Rx. 4,987. The total expenditure came to Rx. 109,865, of which Rx. 42,044 were spent on sanitation and conservancy; Rx. 22,212 on streets, roads, and other public works; and Rx. 18,562 on the interest for and repayment of debt. The scheme for the new water supply was slightly advanced during the year. Water from the Red Hills Lake, the chief source of supply in the municipality, was again pronounced by the analyst after each test to be "suspicious." Considerable extensions were made in the drainage of the town. The registered municipal death-rate was 46 per mille against 52·6 in 1891, and 43·1 in 1890. The mean of the decade is 37·4. The high price of food is given by the local authorities as the cause of the abnormally high rate. The condition and repair of the city roads was said to be satisfactory, four miles of road having been metalled for the first time. The outstanding debt of the municipality amounts to Rx. 272,000, against which must be set the sinking fund, which now amounts to Rx. 91,430. The payments to the sinking fund during the year were Rx. 5,106.

Interior of the Madras Presidency.

The number of municipalities in the interior of Madras was 55, as in the previous year. The councils were partly elective in 33 of these towns, as against 32 in the previous year. In 36 towns the councils elect their own chairman. There are 863 municipal councillors in all, divided thus:—

| | | | | | |
|---|---|---|---|---|---|
| Elected - - | 383 | Non-officials - | 668 | Indians - - | 713 |
| Nominated - | 480 | Officials - - | 195 | Europeans and Eurasians - | 150 |

There was an increase in the total municipal income, which came to Rx. 258,533; of this Rx. 129,499 came from taxation, the chief items being Rx. 59,331 from rates on lands and houses, Rx. 34,586 from tolls; and the average incidence of taxation was 12·17 annas per head of the population. The chief sources of miscellaneous receipts were fees and revenue from markets and slaughterhouses, Rx. 13,274, and grants from Government, local funds, and other sources, Rx. 48,622. The total expenditure of the year was Rx. 268,472, of which the chief items were public works, including drainage and water supply, Rx. 96,268; education, Rx. 30,089; medical services and sanitation, Rx. 76,786; lighting and miscellaneous purposes, Rx. 18,684; supervision and management, Rx. 16,668. The outstanding public debt of all municipalities was Rx. 25,839, after deducting moneys at credit of the various sinking funds.

Each town council in the interior of Madras held, on the average, 28 meetings during the year, with an average attendance of 8·5, against 8·3 in the previous year,

MUNICIPALITIES.

year, out of a strength of 16 members. During the year the construction of nine important drainage and water supply works was proceeded with, and schemes of improvement were prepared for six other municipalities.

The Municipality of Bombay is administered by a committee consisting of 72 members, of whom 16 are nominated by the Government, 36 elected by the ratepayers, 16 by the justices, 2 by the Chamber of Commerce, and 2 by the University.

Bombay. Bombay City.

The total income of the municipality, exclusive of loans, was Rx. 666,518, or Rx. 58,048 more than in the previous year; of this total, Rx. 564,448 accrued from municipal taxation rates and market receipts, the balance being chiefly received from Government and as revenue from property. The chief items of revenue were the general tax, which yielded Rx. 193,933, the water tax, which yielded Rx. 140,708, and the town duties, which yielded Rx. 97,392. The total expenditure of the year came to Rx. 921,119, of which Rx. 266,568 were from borrowed money. The chief items of outlay from current revenue were Rx. 130,156 on the public health department, Rx. 167,251 on streets and other public works, and Rx. 219,723 on the interest and sinking fund of the city debt. The daily supply of water to the city has, by the use of a new source, been increased from 16½ to 29 millions of gallons. The death-rate of the year in Bombay was 32·26 per mille against 29 in the previous year. The outstanding debt of the city at the end of the year was Rx. 2,897,626; the amount paid off during the year was Rx. 27,413.

Interior of the Bombay Presidency.

The total number of municipalities in the interior of Bombay was 176 against 174 in the previous year. The population within municipal limits was 2,292.208, or 12 per cent. of the total population of the British territory in the Presidency. The total number of municipal commissioners in these towns was 2,430, of whom 909 were elected, and the rest nominated by the Government; the proportion of Asiatics to Europeans was 10·6 to 1, and of non-officials to officials 2·5 to 1 on these bodies.

Throughout the greater part of the Presidency meetings were held regularly, and were well attended; but in six municipalities of the Northern Division more than half the number of members failed to attend two-thirds of the general meetings, and in three municipalities of the southern division the average attendance was less than half the members. The total income of all municipalities during the year, excluding extraordinary and debt account, was Rx. 393,925, of which Rx. 152,319 was yielded by octroi, Rx. 123,832 by other rates and taxes, Rx. 73,928 by municipal property and powers apart from taxation. The extraordinary and debt account showed a total of Rx. 113,156, the chief items being sale of securities, loans, and advances from general fund and deposits. The total expenditure, apart from extraordinary and debt account, was Rx. 391,825, of which Rx. 224,306 was spent on promoting "Public Health and Convenience," Rx. 67,998 on public instruction, Rx. 23,678 on public safety, and Rx. 49,746 on administration and collection charges. The payments under extraordinary and debt account amounted to Rx. 44,755. In Karachi new drainage work, for which an expenditure of 6 lakhs has been sanctioned, is being undertaken, in Ahmedabad large drainage works and waterworks have proved eminently successful, and in various towns new waterworks are in contemplation, or in progress. The Inspection Reports on Municipal Schools were, on the whole, fairly satisfactory.

Berar.

The number of municipalities in Berar was eight, as in the previous year, and in all but one the majority of the members are elected by the ratepayers.

There are altogether 129 members, divided thus:—

| | | | | | |
|---|---|---|---|---|---|
| Elected - - | 90 | Non-officials - | 94 | Asiatics - | 110 |
| Nominated - | 39 | Officials - - - | 35 | Europeans - | 19 |

In seven municipalities there occurred 30 vacancies, for which 72 candidates presented themselves. Out of 5,276 registered voters, 1,480 recorded their votes; and the proportion of voters going to the poll ranged from 17 to 49 per cent. in the different towns. The total income of the municipalities was Rx. 20,799, of which Rx. 4,450 accrued from taxes on trades and professions, Rx. 1,275 from water-rates, Rx. 1,923 from conservancy, Rx. 2,573 from a special tax on bargains in cotton and grain levied in two municipalities, and Rx. 7,371 from municipal property, markets, and institutions. The percentage of revenue from taxation to total revenue ranged from 23 per cent. to 63 per

Municipalities.

cent. in different municipalities. The total expenditure was Rx. 19,478, of which Rx. 14,425 were spent on public health and convenience, Rx. 792 on public safety, Rx. 1,733 on public instruction, and Rx. 1,363 on administration and collection charges. Seven out of the eight municipalities contribute towards schools or colleges, and six towards libraries; two spend money on fire establishments, and six on water supply. The average attendance at municipal meetings was about half of the members of each committee.

## DISTRICT BOARDS.

District Boards. General.

The constitution of district boards with precise powers and responsibilities under the law took place more recently than the creation of municipalities; but in most provinces district committees had for many years given assistance or exercised control in the administration of local roads, local hospitals, and local schools. In Madras the Local Funds Act of 1871, and in Bengal the Road Cess Act of 1871, had constituted local bodies with specified powers. In all the more advanced provinces, district boards are now constituted under different enactments. In Madras, the boards have the power of proposing local taxation, and in Bengal they are empowered to decide at what rate, within the legal maximum, the road cess shall be levied in each district; but for the most part the district boards do not possess powers of taxation; they administer funds, or the yield of specific imposts, made over to them for expenditure on roads, schools, hospitals, and sanitation, within their jurisdiction. In most provinces the district boards delegate much of their detailed work to sub-divisional, or minor boards, which are constituted under the law, and are responsible for subdivisions or parts of a district.

Bengal.

In Bengal there were 38 district boards and 104 local boards. On the district boards were 793 members, of whom 309 were elected; on the local boards were 1,230 members, of whom 465 were elected. Out of the total number of 2,023 members, 395 were officials and 296 were Europeans or Eurasians. Of the non-official members, 776 were large landholders or their agents, and 510 were lawyers. During the year, there was held the third general election for members of those Boards which were constituted very soon after the passing of the Bengal Local Self-Government Act of 1885. Except in a few places the election excited little or no interest. By the constitution of the boards, every resident of a thana, or unit of police jurisdiction, who pays one rupee of local rates in the year, is entitled to vote for the member who represents his thana; a list of electors is published before each election. Elective members of district boards are chosen by all the members of local boards for the district. Members sit for three years, and are then eligible for re-election. At least 10 per cent. of the registered electors must vote at every contested election. Several of the elections in 1892–93 fell through because the required proportion of voters did not attend. In the year 1892–93 each district board held on the average 16·4 meetings; no board held more than 24, and none less than 12; and the average attendance at each meeting was less than 10 members or about 45 per cent. of the full strength. The local boards held on the average 10 meetings apiece, at which the average attendance was less than six members, or a little less than half the full strength.

The Bengal boards enjoyed during the year an income of Rx. 719,380, of which the largest items were provincial rates, levied in the form of a road cess, Rx. 362,767; contributions from provincial funds, Rx. 115,458; cattle pound fees, Rx. 45,715; and receipts from ferries and other similar sources of profit, Rx. 44,451. The provincial rates receipts showed an increase of Rx. 11,744 as compared with the previous year; and the provincial contributions an increase of Rx. 35,339. There is included in the nominal income the sum of Rx. 118,813 advanced on loan by the Government to the boards on account of various undertakings. The expenditure of the year was Rx. 702,375, of which the chief items were roads, bridges, and waterways, Rx. 428,874; education, Rx. 105,447; and famine relief, Rx. 28,671. The expenditure on sanitation, water supply, and drainage, shows an increase, but is still considered by the local government to be smaller than it should be. Of the money devoted by the boards to education, rather less than half was spent on primary education. The expenditure on famine relief was incurred chiefly in Darbhanga, where Rx. 26,981

Rx. 26,981 was spent; on the district boards falls the cost of only the earlier and minor measures of relief; when gratuitous relief or larger relief measures are required, the cost falls on the provincial or imperial funds; the relief works of the district board of Darbhanga were open from March 1892 to July 1893; and in consequence of the drain on the funds at the disposal of the board a grant of one lakh of rupees and a loan of 1⅔ lakhs were made from provincial revenues. Out of the expenditure on roads, &c., a sum of Rx. 34,033 was devoted to village roads and paths, and this outlay was in some localities supplemented by private contributions. District Boards.

In the North-West Provinces and Oudh there were, as in the previous year, four district committees and forty-four district boards. The boards consisted of 1,638 members, who were divided as follows:— North-West Provinces and Oudh.

| | | | | | |
|---|---|---|---|---|---|
| Elected - - | 1,286 | Non-officials - | 1,354 | Indians - - | 1,558 |
| Nominated - | 352 | Officials - - | 284 | Europeans - | 80 |

The committees consist of 77 members, who were divided as follows:—

| | | | |
|---|---|---|---|
| Nominated - - - | 52 | Indians - - - - | 61 |
| *Ex-officio* - - - | 25 | Europeans - - - | 16 |

The total expenditure of the boards and committees during the year was Rx. 387,794. The normal income of Rx. 263,706 (of which Rx. 190,800 came from local rates) had to be supplemented by contributions from provincial and other revenues of over 12 lakhs.

The district boards held on an average 13 meetings each, and the district committees 8 meetings each. Both on the boards and the committees the average attendance at meetings was small; at the boards it was less than 30 per cent. of the members, and at the committees less than 50 per cent.

The administration of the boards and committees during the year was, in the opinion of the Lieutenant-Governor, generally successful, and was of great help as a supplement to the general work of the government of the Province. The supervision of education and of medical relief was performed particularly well. The public works administration, which was concerned chiefly with the construction and maintenance of district roads, is also reported to have been carried out in a satisfactory manner.

In every district of the Punjab, except Simla, there was a district board constituted under Act XX. of 1883, and in every district, except Simla and seven frontier districts, there were subordinate local boards acting under the district boards. In 12 districts, situated on or near the frontier, the boards are composed entirely of nominated members, and in the other 18 the members are in part nominated, in part sit *ex officio*, and in part are elected delegates from the local boards. Of the 83 local boards 15 are filled up wholly by nomination, and 68 partly by nomination and partly by election. The total number of elected members in the whole province was 989, and of nominated and *ex-officio* members 595. Elections to the local boards were held in 12 districts during the year; in four there were just as many candidates as vacancies, in two some of the places were in default of candidates filled up by nomination, and the largest proportion of contested to uncontested seats in any district given in the Report of the Local Government is 3 to 14. The proportion of those who voted to those who were qualified to do so varied in the districts in which polls were taken from 13 to 65 per cent.; 12 out of the 30 district boards held a less number of meetings than is required by the rule of their constitution; in 13 the average attendance at meetings was less than half the number of members. Nevertheless the district officers for the most part report favourably as to the conduct and value of district boards, though unfavourably concerning the local boards. In three districts and a part of a fourth the abolition of local boards has been sanctioned by the local government. Punjab.

Excluding debt transactions, the year's income of all the boards came to Rx. 278,607, of which the chief items were Rx. 220,964 from local rates; Rx. 6,278 from school fees; Rx. 14,746 from ferry receipts; and Rx. 7,955 from gardens, veterinary establishments, fairs, &c. The total expenditure of the year was Rx. 292,268, of which the chief items were, education, Rx. 60,000; hospitals, vaccination, and other medical or sanitary charges, Rx. 33,960;

District Boards. experimental cultivation, horse and cattle fairs, veterinary and botanical charges, &c., Rx. 15,100; civil works, Rx. 112,671; to provincial funds Rx. 44,078; general administration, Rx. 12,058. Both in this year and in the previous year the district boards have spent, in addition to their annual income, a certain proportion of the large balances which have accumulated to their credit in consequence of the short outlay of earlier years.

Central Provinces. In every district of the Central Provinces except the backward tract of Mandla, district councils and local boards, subordinate to those councils, have been established. The total number of members on these bodies was 1,194, divided thus:—

| | | | | | |
|---|---|---|---|---|---|
| Elected members | 909 | Non-officials | 1,073 | Asiatics | 1,170 |
| Nominated or *ex officio*. | 294 | Officials | 121 | Europeans or Eurasians. | 24 |

Five hundred and ninety-four meetings were called, of which only 461 were held, the other 133 falling through because the attendance was not large enough to make a quorum. In several cases the meetings of local boards fell below the prescribed yearly minimum. The local Government consider that the insufficient interest shown in these institutions is largely due to the recency of their introduction, and that with time and wise treatment better results may be looked for.

The maintenance and construction of metalled roads is undertaken by the Provincial Public Works Department in behalf of the councils, which, however, advise upon all road projects within their jurisdiction. Education is the most important matter with which the councils deal; they have charge of all primary and many middle schools, and they administer the grant-in-aid funds available for rural schools. In many cases their efforts have been seconded by the liberality of private persons. A scheme for rural sanitary reform has been started, whereby it is hoped that sanitary improvement may become a reality, and district councils have been called upon to allot in its help a certain portion of their funds. The total grant-in-aid made for that purpose in 1892–93 was Rx. 5,000. The amount spent in improving the water supply shows a satisfactory increase on the previous year, being Rx. 15,821, as against Rx. 7,212 in 1891–92, and there has been of late a general increase of activity in the matter of village sanitary improvement. The income of the councils and boards was Rx. 77,084, of which the bulk was yielded by local rates, the main items of their expenditure were Rx. 31,613 on roads and other works, Rx. 24,783 on schools, and Rx. 6,434 on hospitals and vaccination.

Assam. In Assam there are 19 local boards, constituted under the Assam Local Rates Regulation of 1879. They enjoyed for the year 1892–93 an income of Rx. 115,792, and spent Rx. 90,214; 68 per cent. of the total expenditure was devoted to public works and 18¼ per cent. to education.

Madras. In Madras there are 21 district boards, with not less than 24 members on each, of whom one-half are elected by the taluk or subdivisional boards. The members of 86 taluk boards are appointed by Government from the residents and ratepayers of the taluk. On all the boards there were 1,792 members, of whom 1,243 were non-officials and 549 were officials; out of the latter number 72 were members elected by taluk boards to be their representatives on the district boards. Below the taluk boards were 320 village unions, which were occupied chiefly with local sanitation and the management of elementary schools, markets, and other local institutions, entrusted to them by the taluk boards. The district boards held 236 meetings, at which the average attendance was 15 (10 non-officials and five officials), out of an average strength of 31 members. The taluk boards held 1,177 meetings, at which the average attendance was seven members (five non-officials and two officials) out of an average strength of 14 on each board. The village unions held 4,112 meetings, or 503 more than in the previous year. The local government considered the working of the taluk boards and of the village unions to have been on the whole satisfactory, and considerable attention was paid to sanitation.

The income of all the boards during the year was Rx. 828,263, or Rx. 108,757 more than in the previous year. The chief sources of income were local rates, Rx. 586,277; grants from provincial and other funds, Rx. 89,974; school fees,

fees, Rx. 17,343; endowments and miscellaneous, Rx. 104,238. The expenditure of the year was Rx. 822,996, of which Rx. 385,382 were spent on roads, ferries, and other public works; Rx. 159,907 on medical and sanitary purposes, and Rx. 104,597 on education. Out of the public works outlay, Rx. 94,841 were spent on new roads, bridges, school-houses, &c., and Rx. 290,541 were spent on the maintenance of old works. DISTRICT BOARDS.

The length of new roads made during the year was 216 miles, and of roads kept in repair by local boards was 20,572 miles. The expenditure on sanitation, as distinguished from hospitals and vaccination, which cost Rx. 46,084, was Rx. 48,249, of which Rx. 13,621 were spent on improving the water supply.

In Bombay there were 23 district and 201 taluk (or subdivisional) boards; all these boards are elective, except in three backward districts, and seven exceptional sub-divisions. On the boards sat 3,430 members, divided thus: Bombay.

| | | | | | |
|---|---|---|---|---|---|
| Elected - - | 1,544 | Non-officials | 2,709 | Asiatics - | 3,286 |
| Nominated - | 1,877 | Officials - | 781 | Europeans and Eurasians. | 204 |

The total income of the boards was Rx. 442,602, of which more than half accrued from local rates or cesses on land; in addition there were available for spending balances as large in most cases as two thirds of the year's revenue; the total expenditure was Rx. 467,570, the chief items being education and public works. In 10 districts the average attendance at board meetings exceeded 50 per cent. of the members, and in 13 other districts it fell very little short of that proportion. The Bombay Government regarded this result "as satisfactory, seeing that many members live at a considerable distance from the places of meeting." The Commissioners of the northern and southern divisions reported that the administration of the local boards was on the whole satisfactory"; that "there was still great room for improvement"; that "the funds at the disposal of the boards are on the whole economically and usefully administered"; but that "it is difficult to find money for the many needs that arise."

## PORT TRUSTS.

The custody of harbours and the administration of harbour and shore affairs are placed by law in the hands of Port Commissioners, who are appointed for each of the chief ports. Members of these Port Trusts are for the most part appointed by the local governments, and are usually representative of the various Indian and commercial interests of the place. Port Trustees are empowered, subject to the control of the Government, to levy dues, to contract loans for port improvements, to do all that may be needed for the maintenance of the harbour and its approaches, and to erect warehouses, jetties, and docks for the convenience of traders and shipping. The local governments, and so far as can be judged, the public, are well satisfied with the work done by the various Port Trusts. The Commissioners of Port Trusts are the only members of local public bodies who receive a small fee for each attendance at meetings for business. No members of municipal councils, or of districts or local boards, receive any fees for the performance of their local duties. PORT TRUSTS.

The Bombay Port Trust had during 1892-93 an income of Rx. 450,000, or Rx. 30,000 less than in the previous year. The decrease was due to the fall in the exports of wheat and some other staples. The chief items of income were wharfage and dock fees Rx. 226,000, ground and warehouse rents Rx. 86,000; all these items showed a decrease compared with 1891-92. The expenditure of the year came to Rx. 465,000, of which the largest items were Rx. 223,000 for interest on and repayment of debt, and Rx. 115,000 outlay on docks; the deficit of Rx. 15,500 was met from the accumulated reserve of Rx. 150,000. The Port Trust debt at the end of the year was Rx. 4,939,000, and the Port Trust had spent up to date, Rx. 5,240,000 on improving and adding to their property. During the year a 4½ per cent. debenture loan of Rx. 616,000 was successfully converted into a 4 per cent. loan; the subscriptions to the new loan were at an average of 100¼ per cent. The new graving dock, which cost Rx. 109,000, and had been opened in 1891, received 119 vessels, against 63 in the previous year. Bombay.

PORT TRUSTS.

Calcutta.

The income of the Calcutta Port Trust during the year was Rx. 303,000, and the expenditure was Rx. 283,000, exclusive of the Kidderpore dock account. The new docks were opened in September 1892; they have cost Rx. 2,876,000, which sum has now to be added to the previous Port Trust Debt of Rx. 1,161,000. Only 42 steamers and 19 sailing vessels resorted to the new docks during the year. In order to meet the charges on account of the docks the port duty of 4 annas per ton on all vessels entering the port, which had been abolished in 1884, was re-imposed. It was found that after allowing for this duty, and absorbing the surplus accruing on the old jetties and wharves, there would still be a deficit of Rx. 95,500 in the port finances; and an additional rate of 4 annas per ton was imposed on all goods landed from or shipped into any vessel lying within the limits of the port. It is hoped that this rate will nearly meet the deficit, and that gradually, as more vessels resort to the docks, it may be possible to reduce the rate. Apart from the docks, several departments of the Port Trust felt the effect of the general depression of trade, and made smaller earnings than in the previous year. The number and tonnage of vessels entering and leaving the port was smaller than in the year 1891–92, but greater than in any previous year. Steamers arriving were 844, and sailing vessels 221, with an aggregate tonnage of 2,642,249 tons, against 2,699,567 in the year 1891–92.

Rangoon.

The year 1892–93 showed a further increase of 26,000 tons, or 2 per cent., in the shipping visiting the port of Rangoon; though the tonnage of steamers direct from Europe by the Suez Canal decreased. The revenue of the Port Trust increased 4 per cent. as compared with 1891–92, while the expenditure decreased 8 per cent. The total net charge on account of interest on the port debts was Rx. 2,100; and Rx. 5,200 of debt was paid off during the year. Rx. 28,000 were spent on original works of improvement, among which were extensions of wharves and jetties, reclamation of the strand bank, putting down moorings and erection of storehouses. The scale of pilotage fees and the schedule of rates for use of the jetties were revised during the year. Six accidents to shipping took place during the year in the harbour and approaches; in no case was material damage done.

Madras.

The receipts of the Madras Port Trust were Rx. 51,600, or Rx. 7,200 less than in the preceding year, and the expenditure of the year was Rx. 49,600. Trade was dull, though there were large receipts of grain from the coast ports. The decrease of exports was partly due to the fact that cotton and ground nuts, which used to be exported from Madras, are now being carried by rail to Bombay and Pondicherry for export thence.

A further expenditure of Rx. 25,600 was incurred on the Madras harbour works, against Rx. 65,200 in the previous year; and by the end of the year 1892–93 the total outlay had reached Rx. 1,194,000, against the total sanctioned estimate of Rx. 1,238,000. The work of the year was confined to the pier heads at the ends of the arms of the breakwater.

Karachi.

The income and expenditure of the Karachi Port Trust were respectively Rx. 64,000 and Rx. 49,000, as compared with Rx. 95,000 and Rx. 51,000 in the previous year. There was a large decrease in the export trade; the wheat exportations were 225,000 tons, against 618,000 tons in the previous year, and there was some decrease in the exports of oilseeds and cotton; hides alone showed a considerable increase. The shrinkage of trade was largely due to short harvests. The principal improvements of the year were the extension of one wharf and the deepening of the port entrance and channel, from which 605,000 tons of sand were removed by dredging during the year.

The troopships from England with regiments to or from the North West Frontier or the Punjab brought to, and carried away from, Karachi 31,964 men during the year. The outstanding debt at the end of the year was Rx. 440,000, of which Rx. 200,000 were borrowed for specific works during the year 1892.

There are other minor ports in which smaller sums are raised yearly and expended on improvements. The increase in the value of the total foreign trade of the five principal ports during the past ten years is set forth below:

Madras

Madras alone shows advance as compared with the previous year; Karachi shows a very large decrease. PORT TRUSTS.

| NAME OF PORT. | Value of the Total Foreign Trade, in Merchandise only, during the Year | | | |
|---|---|---|---|---|
| | 1883–84. | 1889–90. | 1891–92. | 1893–94. |
| | Rx. | Rx. | Rx. | Rx. |
| Bombay - - - - - | 53,257,000 | 65,748,000 | 66,352,000 | 65,674,000 |
| Calcutta - - - - - | 57,335,000 | 63,112,000 | 63,932,000 | 63,640,000 |
| Rangoon - - - - - | 7,810,000 | 10,893,000 | 12,615,000 | 12,525,000 |
| Madras - - - - - | 7,823,000 | 10,339,000 | 8,918,000 | 9,068,000 |
| Karachi - - - - - | 5,048,000 | 8,405,000 | 11,311,000 | 7,546,000 |

STATEMENT showing the Number of Municipalities in India, their Receipts and their Expenditure, for the Year 1892–93.

| | Bengal. | | North Western Provinces and Oudh. | Punjab. | Burma. | Central Provinces. | Assam. | Madras. | | Bombay. | | Minor Provinces. | TOTAL. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Presidency Corporation. | District Municipalities. | | | | | | Presidency Corporation. | District Municipalities. | Presidency Corporation. | District Municipalities. | | |
| Number of Municipalities | 1 | 146 | 103 | 149 | 41 | 56 | 12 | 1 | 55 | 1 | 176 | 10 | 751 |
| Population according to the census of 1891 | 681,560 | 2,731,182 | 3,154,741 | 2,014,833 | 840,167 | 697,104 | 75,156 | 452,518 | 1,648,449 | 821,764 | 2,292,208 | 243,199 | 15,652,881 |
| Receipts: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | R | Rx. | Rx. |
| Octroi | - - | - - | 219,848 | 257,594 | - - | 73,364 | – | 4,988 | - - | 128,975 | 151,068 | 26,584 | 862,421 |
| Other Taxation | 393,009 | 217,537 | 44,228 | 18,952 | 113,213 | 22,592 | 8,729 | 91,392 | 129,500 | 436,160 | 124,414 | 2,159 | 1,601,885 |
| Sources other than Taxation (excluding Deposits and Advances). | 171,931 | 69,368 | 105,420 | 107,820 | 189,204 | 28,448 | 6,236 | 29,483 | 95,364 | 102,158 | 115,460 | 11,724 | 1,032,616 |
| Loans | - - | 5,500 | 130,036 | 48,552 | 13,900 | 10,000 | 360 | - - | 21,529 | 25,000 | 80,500 | 9,530 | 344,907 |
| TOTAL Rx. | 564,940 | 292,405 | 499,532 | 432,918 | 316,317 | 134,404 | 15,325 | 125,863 | 246,393 | 692,293 | 471,442 | 49,997 | 3,841,829 |
| TOTAL (1891–92) Rx. | 744,346 | 271,558 | 589,218 | 438,927 | 288,454 | 164,652 | 15,487 | 105,265 | 228,595 | 947,487 | 402,589 | 49,941 | 4,246,519 |
| Expenditure: | | | | | | | | | | | | | |
| Cost of Collection and Administration | 51,688 | 34,080 | 43,529 | 55,838 | 29,937 | 31,912 | 1,736 | 9,963 | 19,414 | 50,393 | 47,708 | 7,471 | 383,669 |
| Public Health and Conveniences | 384,705 | 205,293 | 362,841 | 221,521 | 180,117 | 96,969 | 12,122 | 68,311 | 174,287 | 544,814 | 223,216 | 31,383 | 2,505,579 |
| Public Safety | 47,896 | 20,562 | 53,346 | 63,208 | 25,538 | 1,019 | 321 | 5,116 | 9,505 | 85,349 | 23,703 | 3,894 | 339,457 |
| Repayment of and Interest on Debt | 109,202 | 2,154 | 16,586 | 14,959 | 20,607 | 3,859 | 57 | 13,326 | 1,532 | 173,503 | 11,739 | 985 | 368,509 |
| Miscellaneous | 32,807 | 28,519 | 56,641 | 93,369 | 37,009 | 19,183 | 924 | 9,085 | 39,338 | 37,891 | 90,427 | 8,564 | 453,757 |
| TOTAL Rx. | 626,298 | 290,608 | 532,943 | 448,895 | 293,208 | 152,942 | 15,160 | 105,801 | 244,076 | 891,950 | 396,793 | 52,297 | 4,050,971 |
| TOTAL (1891-92) Rx. | 654,700 | 268,492 | 515,575 | 431,654 | 320,455 | 130,945 | 14,723 | 110,969 | 194,071 | 943,982 | 409,650 | 54,888 | 4,050,104 |

## SANITATION.



European Troops.

Owing chiefly to the prevalence of influenza and malaria, the general health of the European troops in India during 1892 was not so good as in the previous year. The total admissions into hospital were in the ratio of 1,517 per 1,000 of the average strength of 68,137, against 1,379 in 1891; the daily average sick-rate was 84, or five per 1,000 more, and the death-rate was 17·07, as compared with 15·89. The chief causes of admission were, as usual, venereal diseases and ague, which accounted for 27 and 28 per cent. respectively of the total sickness. Enteric fever was the chief cause of mortality, yielding a death-rate of 5·52 per 1,000, a slight decrease on 5·73, the ratio of the previous year. This fever alone caused 32 per cent. of the total deaths. The liability of young and unacclimatised soldiers to enteric fever is again shown in the year's statistics, for among troops under 25 years of age the death-rate from this disease was 8·44 per 1,000, while among men between the ages of 25 and 29, and between 30 and 34, the mortality equalled 2·92 and 1·65 per 1,000 respectively; and whereas among men of less than two years' service in India the death-rate from enteric fever was 10·69 per 1,000, among men of three to five years' service it was 3·76, and among men of 6 to 10 years' service the rate was 2·15 per 1,000. In his report for the year under notice the Sanitary Commissioner, Dr. Rice, gives, as usual, a number of extracts from the reports of medical officers in stations in which there were outbreaks of the fever during the year; but the officers, he says, "were usually unable, even to their own satisfaction, to trace out in any given outbreak a definite insanitary condition to which the outbreak might, with certainty, be attributed."

Cholera was not so prevalent among the European troops as in 1891; but the disease ranked next to enteric fever in order of mortality, having caused 10 per cent. of the total deaths. The fatal cases decreased from 168, or 2·51 per 1,000 of strength, to 121, or 1·78. Of these, 102, representing a ratio of 2·42 per 1,000, occurred among troops in the Bengal Army, against 114, or 2·78, in the previous year. In the Madras Army there were seven cholera deaths, as compared with 21 in 1891, and the Bombay Army recorded 12 deaths from the disease, against 33.

The loss to the whole European Army in India by invaliding during 1892 amounted to 1,661 men, equal to 24·37 per 1,000 of strength, against 1,793, or 26·78, in 1891. Of the three armies, the proportion of invalids to strength was highest in Madras, viz., 33·05; in the case of Bengal the proportion was 22·57, and in that of Bombay, 21·33. Out of the total number invalided, 40 per cent. were discharged as unfit for further service, being 6 per cent. more than in 1891. As regards the influence of age and length of residence in India upon invaliding, 53·41 per cent. of the number invalided were under 25 years of age, against 54·01 in 1891, while 35 per cent. were of less than two years' service, and 77 per cent. were of less than five years' service. In the European Army, 79 per cent. of the total strength had seen less than five years' Indian service.

Native Troops.

Though there was more sickness in the Native Army of India during 1892, owing to the influence of influenza and malaria, than in the previous year, the mortality was not so high. On an average strength of 127,355 the admissions into hospital were in the ratio of 1,092 per 1,000, against 972; the daily sick-rate was 37, an increase of two per 1,000, and the death-rate was 14·97, against 15·44. Ague continued to rank first among the causes of admission, and yielded 48 per cent. of the total. Respiratory diseases, as usual, were the chief causes of death, and represented a ratio of 4·27 per 1,000 of average strength, against 3·56 in 1891. The death-rates under this head, of all branches of the Army except that of Central India and Rajputana, were higher than in 1891. Pneumonia alone accounted for 415 deaths, or 3·26 per 1,000 of strength. Among Native troops the mortality from this disease was more than five times as high as that among European soldiers. From malarial fevers there were 181 deaths, equal to 1·42 per 1,000. From these two causes, pneumonia and malarial fever, 36 per cent. of the total deaths were recorded. From cholera the death-rate was 2·14 per 1,000, against 2·64 in 1891. Fevers of all kinds

Sanitation.

were the cause of 17 per cent. of the total deaths, while among the European troops 41 per cent. of all the deaths were from fevers. From ague, remittent and simple continued fevers, the deaths among the Native troops yielded a ratio of 2·45 per 1,000. Among the European troops the proportion was only 1·42. On the other hand, the death-rate from enteric fever among the Native troops was only 0·13 per 1,000, as compared with 5·52 among the European troops.

Jails.

The health of the prison population of India during 1892 was not on the whole satisfactory. The ratios of admission into hospital and daily average sick per 1,000 of strength were 1,116·87 and 37·94 respectively, against 978·57 and 33·60 in 1891. The death-rate also rose from 30·19 per 1,000 to 35·94. The average rate of mortality ranged from 58·97 in Assam to 17·16 in Berar. The increase in the death-rate was spread over all the 10 provinces, except Coorg, where the jail death-rate declined from 32·64 per 1,000 to 30·33. Increased mortality was most noticeable in the Central Provinces and Madras Presidency. In the former the jail death-rate rose from 30·37 in 1891 to 44·66, and in the latter, from 35·33 to 45·14. The increase in the general death-rate was mainly due to the prevalence of cholera and bowel complaints, the deaths from which rose respectively from 324 and 738 in 1891 to 510 and 820. Berar and Coorg were the only provinces in which the jails were free from cholera. The proportion of deaths from this disease, per 1,000 of strength, was greatest in the jails of the Madras Presidency.

General population.

Births were registered throughout all the 10 provinces during 1892. In Bengal until the end of 1891 the registration of births was confined to selected towns, and was effected by municipal agency. Since the beginning of 1892 registration has been extended to all towns and rural areas, and the work has been entrusted to the police. The highest mean provincial birth-rates recorded were: in Berar, 39·9 per 1,000 of population; the Central Provinces, 38·39; and the Punjab, 38·16. In the remaining provinces the rates ranged between 36·17 in the North Western Provinces and Oudh and 22·12 in Coorg. Of the 10 provinces, the birth-rates were higher in four than in the previous year, and in the remainder, excepting Bengal, in which no comparison can be made, they were lower. In all but four of the provinces (Bengal, the Punjab, Assam, and Coorg) the birth-rates exceeded the death-rates, the excess per 1,000 varying between 11·1 in Berar and 2·06 in the North Western Provinces and Oudh. The year 1892 was not a healthy one, and the death-rate for all the provinces rose from 28·42 per 1,000 of population in 1891 to 32·48. The highest death-rates were registered in the Punjab, 49·48; in Assam, 34·21; in the Central Provinces, 34·14; and in the North West Provinces and Oudh, 34·11. In the remaining six provinces the rates ranged from 32·50 in Bombay to 20·0 in Lower Burma. The abnormal mortality in the Punjab amounted to about 20 per 1,000, and was attributed to excessive outbreaks of cholera, fever, and influenza.

From all the chief diseases, except dysentery and diarrhœa, more deaths were registered than in 1891. Cholera was the cause of 724,015 deaths in 1892, being in the ratio of 3·39 per 1,000 of population, against 582,430, or 2·81, in the previous year. The increase was spread over all the provinces, except Berar, Madras, and Assam, and the excess was most marked in the Punjab, Bombay, and Lower Burma. A comparison of the cholera mortality in individual provinces since 1877 shows that in Bengal, the Punjab, and Coorg the number of recorded deaths was never so great as in 1892. The highest death-rate from cholera was registered by Assam, viz., 4·29 per 1,000, which, however, was a slight improvement on the rate of the previous year of 4·76. The greatest improvement occurred in Berar, where the cholera death-rate declined from 2·8 in 1891 to 0·7 per 1,000.

From small-pox there were 92,680 deaths, representing a rate of 0·43 per 1,000, against 93,745, or 0·45, in 1891. The decrease, however, was confined to Assam and the North Western Provinces and Oudh, for in all the other provinces the mortality from this disease was greater than in the previous year. But only in Madras Presidency and Coorg did the death-rate exceed one per 1,000, the former having recorded a ratio of 1·75, and the latter of 5·27.

Fevers were more prevalent in all the provinces, excepting the Central Provinces and Berar, than in 1891, and in the combined provinces the total deaths numbered 4,589,496, equal to 21·06 per 1,000 of population, as compared with 3,784,051, or 18·27. This shows an increase in 1892 of 805,445.

The

The excess was greatest in the Punjab, where the fever deaths rose from 442,254, or 21·52, to 715,890, or 34·83. The vast majority of these deaths, however, were, it is reported, caused by fevers of malarial origin, and occurred in the last four months of the year. SANITATION.

The total number of deaths returned under dysentery and diarrhœa was 231,427, or 1·07 per 1,000, against 239,953, or 1·15, in 1891. Of the 10 provinces, five shared in the decrease of 10,890, and in the other five the mortality was greater than in 1891.

The total number of successful vaccinations performed during 1892–93 was 6,396,480, being an increase of 513,797 on the previous year's work. 2¼ millions of the total were under one year of age, and about three millions were between the ages of one and six years. The proportion of population protected by the year's operations ranged from 63·80 per 1,000 in Coorg, and 37·0 in Berar, to 20·34 in the North Western Provinces and Oudh, and 19·29 in Upper Burma. In the vaccination of infants the best results were, as usual, obtained from Berar, where 66 per cent. of the children born during the year, estimating the annual births at 40 per 1,000 of population, were protected against small-pox. In three other provinces (Bombay, Central Provinces, and the Punjab) the percentage was over 50, and in the remainder it ranged from 22·5 in the North Western Provinces and Oudh to 11·4 in Bengal. Vaccination.

Some of the important sanitary works which have been either completed, in progress or under consideration, during 1892, were as follows:—In Calcutta progress, was made in the improvement of bustees and in road-making. The construction of two new settling tanks increased the supply of water per head of population to 37 gallons in the town proper, and about 17½ gallons in the added area. Eighteen miles of distribution pipes were also laid, bringing the total up to 285·73 miles, and the total number of premises supplied at the close of the year was 22,831. Improvements continued also to be made in the drainage of the town. During the year a large flushing reservoir, holding 300,000 gallons, was constructed near the Bhawanipur Pumping Station, and provision has been made in the Loans Budget for 1893–94 for a large extension of the flushing system. Much, however, still remains to be done in the added area, where it is reported there are some 200 miles of open drains which can be adapted and used for surface drainage. This matter was receiving the careful attention of the Commissioners. The municipalities of the interior of Bengal spent Rx. 147,871 on sanitation, being an increase of Rx. 14,114 on the sum expended in the previous year. In improving town and rural areas the local bodies spent Rx. 33,466, and a further sum of Rx. 31,947 was contributed by private individuals, the most important work being the construction of waterworks at Nasirabad by Raja Surya Kanto Acharji Bahadur, at a cost of Rx. 14,276. The Bengal Sanitary Board was not able to hold more than one meeting during the year, owing to the frequent absence of some of the members on tour. Among the more important matters which came under their consideration were the drainage and water-supply of the town of Pabna, and the drainage of the towns of Dinajpur and Jamalpur. Several projects for water-supply and drainage proposed by Municipal Commissioners and District Boards were also submitted to the Sanitary Board; in fact they became so numerous that the Lieutenant Governor found it necessary to define the duties of the Board with regard to the preparation of such projects, and precise instructions on the subject were issued. In the North Western Provinces and Oudh the Benares waterworks were completed, and opened on the 18th November by the Lieutenant Governor; water-supply projects for Cawnpore and Lucknow were sanctioned and their construction put in hand; minor waterworks were completed at Haldwani and Naini Tal, and others were either in progress or under consideration. At Naini Tal the drainage and sewerage scheme was nearly completed, and a similar project was sanctioned for Benares; the Kali Barhganga drainage scheme was completed. The question of the reconstitution of the Sanitary Board was before the Local Government during the year, but at its close final orders had not been issued. The more urgent projects for the relief of obstructed drainage in certain tracts has for some time past been under the consideration of the Board, and the question of carrying into effect the Village Sanitation Act (Act II. of 1892) has been referred to them. In the Punjab, the Delhi and Abbottabad waterworks were completed, Sanitation.

SANITATION.

and the former was formally opened by the Lieutenant Governor in November of the year under notice; rapid progress was being made in the extension of the waterworks at Simla, and in the execution of those for the town and cantonment of Kohat, while in several other cities works of a similar character were either in progress or under consideration. The intramural drainage works at Gujranwala were approaching completion, the drainage scheme at Kohat was finished, and the drainage of Peshawar was greatly improved. The Sanitary Board held six meetings, when they considered and recommended the adoption of improvement in the rules for the collection of vital statistics, which the Local Government ultimately approved. Acting on the suggestion made by the Army Sanitary Commission, the Board recommended to the Government the appointment of a first class executive or superintending engineer to their body. In Burma no sanitary works of any magnitude were undertaken, but much activity is said to have been displayed throughout the larger towns of the province in the matter of conservancy. The Shone and Ault sewerage system in Rangoon worked satisfactorily during the year, and 587 new house connections were made, bringing the total up to 1,180. "It is gratifying to find," the Sanitary Commissioner states, "that as the houses become connected with the sewerage system, the death-rate in areas which are served by this means steadily declines." The Municipal Committee now propose to borrow seven lakhs of rupees for increasing the pressure on the water-supply of the town, the present pressure being inadequate. Another important measure for the welfare of Rangoon is the scheme for the reclamation of the low-lying lands in the east of the town, which has received the sanction of the Government of India. The work of the Burma Sanitary Board consisted mainly in considering the survey of selected towns. In the Central Provinces the most important sanitary works completed or under consideration were the following:—The Raipur waterworks were opened on the 30th December with excellent results, and a scheme on the same lines was sanctioned for Rajnandgaon, at a cost of Rx. 18,936. In several towns the water-supply was improved, and in others water and drainage surveys were either completed or being carried out. The Sanitary Board was chiefly occupied with village sanitation. In many villages the water-supply and drainage were improved, and the sites of others cleansed, under the direction of the Board. In Assam no sanitary work of special importance was carried out during the year, but much attention was given to general sanitary improvements. The Sanitary Board had under their consideration the improvement of the water-supply of villages, and particularly village conservancy. In the Madras Presidency the sanitary works undertaken and carried out during 1892 consisted chiefly in the sinking and repairing of wells, construction and repairing of tanks, and other minor improvements. The municipalities set apart 60 per cent. of their total income for sanitary work, and the District Boards 8 per cent. In the Sanitary Engineering Department considerable progress was made. Nine water-supply and drainage works, estimated to cost Rx. 146,100, were in course of construction, while schemes for the improvement of water supply in five towns and of drainage in another, estimated to cost about Rx. 214,800, were submitted to the Government. In addition to other work, the Department also sanctioned 165 plans and 202 estimates for sanitary works, of the value of Rx. 21,771, and furnished plans and designs wherever necessary. In Madras city the question of improving the water-supply and drainage was still engaging the attention of the Municipal Commissioners. A considerable sum was expended on the conservancy of the city. In the Bombay Presidency several water-supply and drainage projects were in progress. The Ahmedabad waterworks, which were opened in the previous year, proved eminently successful, as did also the drainage project, so far as completed. Arrangements were being made for supplying the city of Surat with water from wells, or galleries, sunk near the river at Warucha. The waterworks at Hubli and Dhulia were nearing completion, and the plans and estimates for those at Dharwar were finally approved. Besides these, a large number of works for the improvement of the water-supply of the smaller municipal towns were completed or in progress. The Sanitary Board entered on their duties in January, and among the more important of their transactions were projects for the water-supply of several towns, and improvements in this respect in others. The expenditure of the Health Department of the city of Bombay on sanitary measures during the year was Rx. 117,552. The daily quantity of water was increased

increased from 16¼ to 29 gallons by the introduction of the Tansa supply. Various improvements were made in the drainage of the city. The sewerage of Colaba division on the Shone system, at a cost of Rx. 70,961, was sanctioned by the Corporation just before the close of the year. In Berar the municipalities spent over 60 per cent. of their income upon sanitary work. Great attention was paid to conservancy, and good progress was made in improving the Akola water-supply at Kapsi. A complete system of drainage for the city of Amraoti was considered, and will be taken in hand as soon as funds are available. Excluding municipalities, the expenditure on sanitary improvements in Berar amounted to Rx. 14,857, principally incurred on village conservancy and minor improvements. The District Sanitary Boards were chiefly occupied in projects for improving the sanitary state of villages. Village Sanitary Boards do not appear, so far, to have proved very active in Berar. SANITATION.

## III.

## CRIME AND POLICE, CRIMINAL JUSTICE, JAILS AND CIVIL JUSTICE.

### CRIME AND POLICE.

CRIME AND POLICE.

THE organisation of the Indian Police underwent no material change in the year under review. Towards the close of the year, however, a proposal made by the Government of India to recruit a portion of the Assistant Superintendents by a competitive examination to be held in London, was approved by the Secretary of State.

Efforts were made to obtain better recruits for the subordinate ranks by offering improved pay and prospects; and schemes to provide these were sanctioned or were under consideration in almost every Province. Schools for the instruction of constables and subordinate officers had been opened in some of the Provinces, and trained reserves of armed police were being organised at the headquarters of many districts for the maintenance of order, and to avoid too frequent resource to the military. Energetic action had been taken by the Governments of the North-West and Central Provinces, acting in co-operation with the Central Indian States, to suppress the gangs of dacoits by which their frontiers had long been harassed.

Detailed statements will be found in the Statistical Abstract relating to British India, showing (1) particulars of the strength, cost, &c., of the police, and (2) the numbers of the principal offences reported to have been committed in each Province.

Much attention was paid by the Provincial authorities to measures for the prevention of crime, such as the registration of bad characters and patrolling by the police.

In considering the numbers of reported crimes in each Province, it should be borne in mind that on the average at least 6 per cent. of these are declared by the magistrates never to have occurred, and far more are found by the police either never to have occurred, or to be of too petty a character to call for action.

Bengal

There was in Bengal during the year under review the heaviest outbreak of serious crime that has occurred for many years; it is attributed to the high prices of food resulting from deficient crops. The number of reported cognizable offences (*i.e.* offences for which a police officer may arrest without warrant, and which are, speaking generally, grave offences against property, the person or the State) rose from 128,472 in 1891 to 146,185; while the number of persons brought to trial for such offences rose from 206,925 to 221,456, of whom 137,515 were convicted, as compared with 123,961 in the previous year.

There was also an increase of 2,553 in the number of non-cognizable offences; *i.e.* minor offences, on account of which the police are not empowered to arrest.

The value of property stolen rose from Rx. 131,313 in 1891 to Rx. 147,117, of which only 18·9 per cent. was recovered, as compared with 21·1 per cent. in the former year.

The actual strength of the regular police force (exclusive of the railway police which numbers about 600 of all ranks) at the close of the year was 74 superior officers with 22,295 subordinates, and the cost amounted to Rx. 430,371, an increase of Rx. 7,752 over that for 1891. Their conduct continues to show a satisfactory improvement, but the number of educated subordinate officers and men slightly decreased.

The village or rural police numbered 169,081, and cost Rx. 674,890. Their conduct was still very indifferent, and whereas only ·8 per cent. were rewarded for good work, 11·9 per cent. were punished for misbehaviour.

In

CRIME AND POLICE.

North-West Provinces and Oudh.

In the North-West Provinces and Oudh there was a striking diminution in the volume of crime, which is attributed partly to the favourable season, and partly to the vigorous action taken against the criminal classes in previous years; but the serious offence of dacoity (robbery by five or more persons) increased materially; and in this, as well as in the other more heinous crimes, the proportion of undetected cases continued to grow. Active measures were taken in the districts infested by the dacoits during the year, which resulted in breaking up several gangs. Reports of cognizable offences decreased by 30,734 as compared with 1891. Property valued at Rx. 181,456 was stolen during the year, of which 31 per cent. was recovered; and 91,689 persons were made amenable to justice, of whom 68,838 were convicted.

Non-cognizable offences also decreased by 6,129. For such offences process issued against 139,781 persons, of whom 44,700 were convicted.

The sanctioned strength of the regular police was 23,531 of all ranks, and its cost Rx. 478,484. The quality of the force continued to be indifferent, and the standard of education low, but good results were expected from the improvement of its prospects and the institution of training schools.

The rural police numbered 90,086, and cost Rx. 292,098. There was a marked decrease in the number of punishments inflicted on village policemen.

Punjab.

There was a diminution of serious crime in the Punjab in 1892, although the number of murders committed in the Peshawar district was unusually large. In cognizable crime the figures show an increase of 2,155 cases, as compared with 1891, but the increase is more than accounted for by the larger number of cases under special laws, relating to Forests, Excise, Sanitation, &c. During the year 82,306 persons were brought to trial, of whom 52,507 were convicted. Process issued in 45,868 non-cognizable cases, and 28,419 persons were convicted. The value of property stolen was estimated at Rx. 103,986, of which about 38 per cent. was recovered.

The strength of the police force was 20,543 officers and men, and it cost Rx. 338,583. Its conduct during the year showed considerable improvement. A school of instruction was established early in the year at Phillour, which was doing good, and the number of educated constables had increased.

Burma.

The Burma Police is organised in two branches, Military and Civil.

In Lower Burma the strength of the Military branch was increased during the year by 1,995 officers and men, and steps were taken to improve the quality and organisation of the force, which numbered at the close of the year 3,449 of all ranks, organised in two complete battalions with one detached company, and composed mainly of Sikhs, Jats, Punjabis and Gurkhas from India, and indigenous Karens. Its cost for the year (exclusive of hospital charges and rations) was Rx. 64,960.

The Civil Police was reduced at the same time from 8,485 of all ranks to 6,165, and its cost by Rx. 30,843. Training schools were being established at the headquarters of each district, and care was being taken that each man should be taught his duties. Village police were also being organised throughout Lower Burma by the resuscitation of the old indigenous system.

There was an increase during the year in crimes of violence, though cognizable crime in general showed a decrease; 32,186 cognizable cases were reported, with the result that 41,772 persons were brought to trial, of whom 27,617 were convicted. Process also issued in 11,339 non-cognizable cases, and 10,088 persons were convicted. Property valued at Rx. 92,827 was stolen, of which 35 per cent. was recovered.

In Upper Burma a large reduction was effected in the Military Police, two battalions being transferred to the Native Army, and the remaining 12 battalions reduced in the aggregate by 226 men. The cost has thus been reduced from Rx. 464,820 to Rx. 384,227, and the strength from about 15,000 to about 13,200 of all ranks.

CRIME AND POLICE. An addition was made to the Civil Police during the year of 14 officers and 350 men, and the force was thus brought up to a strength of 8,264 of all ranks, costing Rx. 172,071.

The returns of violent crimes show a marked diminution, and the pacification of the country made satisfactory progress; 13,339 cognizable cases were reported, and of 16,231 persons brought to trial, 11,053 were convicted. Process issued also in 3,334 non-cognizable cases, in respect of which 2,434 persons were convicted. Property was stolen to the value of Rx. 43,299, of which only 19 per cent. was recovered.

Central Provinces. Cholera was rife in certain districts of the Central Provinces during the year, and the consequent state of confusion resulted in a large number of petty thefts, which raised the total of cognizable offences reported to 24,282 as compared with 23,595 in 1891. The completion of the Kutni-Bilaspur branch railway also led to an influx of professional criminals, and the organisation of a railway police force had to be undertaken. There was a falling off in the detective success of the police in cases of robbery, the percentage of convictions to persons arrested having fallen from 77·87 to 75·29 per cent., and the proportion of stolen property recovered from 34 to 33 per cent. On the other hand two notorious gangs of dacoits were broken up in the Saugor District in the course of the year. Process issued in 9,532 non-cognizable cases, and led to the conviction of 6,584 persons.

The total strength of the police force was 8,574 of all ranks, and its cost Rx. 150,880. Its conduct and relations with the public were satisfactory.

Assam. The Assam Police is, like the Burma Police, divided into two branches, Military and Civil. The Military branch is organised in four battalions and a detached company, having a total strength of 2,556 of all ranks, and costing Rx. 70,152. The Surma Valley battalions did excellent service during the year in operations in the Lushai Hills; and the whole force is reported to have been in a high state of efficiency.

The Civil Police numbered 2,118 of all ranks, and cost Rx. 42,511. Besides these there were in this Province rural police numbering 6,812, and costing Rx. 29,396. The material of which the subordinate police are composed is not good, and can only be improved by an offer of better pay and prospects, which is not possible in the present state of the provincial finances.

There was a small decrease during the year in reported cognizable crime (from 10,441 to 10,301 cases), and 10,512 persons were brought to trial for such offences, 6,424 being convicted. In non-cognizable cases process issued against 10,931 persons, of whom 7,028 were convicted. The value of property stolen during the year is estimated at Rx. 12,952, of which about 32 per cent. was recovered.

Berar. In the Berar Districts the police do not appear to work very efficiently, and there has been an increase of cognizable crime. The total number of such cases reported was 9,151, and 8,649 persons were brought to trial, of whom 5,592 were convicted. Property was stolen to the value of Rx. 23,976, of which 27 per cent. was recovered. Process issued in 7,265 non-cognizable cases against 14,882 persons, of whom 3,696 were convicted.

Madras. The increase of crime in Madras, consequent on scarcity and the high prices of food-grains, was even more marked in 1892 than in the preceding year, and, as might be expected, occurs chiefly under the head of thefts. The general proportion of cases detected (47 per cent.) is the highest that has been achieved during the last 10 years, but out of 383 murders only 105 were detected, and out of 339 reported dacoities only 121. Under the head of cognizable crime 154,239 cases were reported, 190,675 persons were made amenable to justice, and 119,274 were convicted; property valued at Rx. 143,288 was stolen, of which about 22 per cent was recovered. Process issued in 109,083 non-cognizable cases against 205,376 persons, of whom 65,733 were convicted.

The police force comprised 54 superior officers and 22,445 subordinate officers and men, and cost Rx. 414,439. A proposed addition to it had been recommended to the Government of India, and several improvements in its organisation were adopted in the course of the year. The village police numbered

numbered only 166, and cost Rx. 646. Its re-organisation was engaging attention. CRIME AND POLICE.

This year was marked, as regards the Presidency proper of Bombay, by a further reduction in the volume of crime, which is ascribed to the favourable season and to the efficient working of preventive measures. A similar result was obtained in Sind, notwithstanding less favourable circumstances. In Bombay City, however, there was a large increase in the number of burglaries and thefts. The chief feature in the police annals for the year was an outbreak of dacoity in the Central Division, which required special repressive measures. The total number of cognizable offences reported was 46,830, and for these 52,890 persons were brought to trial, of whom 35,859 were convicted. Property valued at Rx. 150,350 was stolen, of which about 45 per cent. was recovered. In respect of non-cognizable offences process issued in 109,820 cases against 179,749 persons, of whom 39,866 were convicted. Bombay.

The total strength of the regular police (including Bombay Town and Sind) is 20,755 officers and men, costing Rx. 381,359. There is, in addition, a system of village police.

The efficiency of the regular force is reported to have been good, except in Sind, where improved pay and prospects were much needed, and a scheme to provide these was under consideration.

## CRIMINAL JUSTICE.

A full account of the Criminal Courts in India will be found in the Decennial Reports for the year 1882–83 and for 1891–92. CRIMINAL JUSTICE.

As previously noticed, 1892 was a year of scarcity and high prices in some provinces, which caused a considerable increase in the total number of convictions, principally for theft and similar offences.

A general improvement in the efficiency of the honorary magistrates is a satisfactory feature of the Bengal report. Though their number was less and the number of benches which sat during the year was 216, or two less than in 1891, the number of persons tried by them rose from 53,142 to 59,166, or 26·5 per cent. of the number tried by the magistracy throughout the Province; considerable relief was thus afforded to the stipendiary magistrates. The total number of persons tried by all Courts during the year was 275,050. Of these 228 were Europeans, nearly half of whom were prosecuted under special and local laws. The percentage of convictions to persons tried was 68·4. The most conspicious features in the returns are the increases (1) in the number of offences against property, due to the bad seasons, and (2) in the number of those by, or concerning, public servants. Bengal.

Trial by jury obtains in some Sessions Courts, and these remained unaltered. On and after the 1st November, however, the list of offences to be so tried was altered by the removal of cases of murder and of some other offences, and by the addition of offences relating to marriage. The number of cases so tried was 294, in 264 of which the judge approved or did not dissent from the verdict, while in six he expressed a partial disagreement; 24 cases were referred under Section 304 of the Procedure Code to the High Court, with the result that the verdict was set aside in nine, modified in one, and sustained in six cases, the remainder being undecided at the close of the year.

The number of appeals again shows a large increase. This increase is ascribed in the case of the subordinate Appellate Courts partly to the increased number of appealable sentences passed, but partly also to the withdrawal from these Courts by the Code of 1882 of the power to enhance sentences. Of appeals to the High Court 61·2 were rejected as compared with 51·7 in the previous year. In the Sessions and District Magistrates Courts 31·9 and 15·1 per cent. of appeals were unsuccessful, against 29·8 and 15·9, respectively, in 1891. Of 845 cases received for revision by the High Court, the sentence of the Lower Court was affirmed in 440, reversed in 249, varied in 102, and otherwise disposed of in 54. In the Subordinate Courts 67·1 per cent. of the applications for revision were rejected.

CRIMINAL JUSTICE. North-West Provinces and Oudh.

In the North-West Provinces also an increasing part in the administration of justice was taken by the honorary magistrates in 1892, and one new bench was created. The number of persons tried by all courts during the year was less than in the preceding year by 9,331, the only considerable increase being under the head of offences against special and local laws, and due to increased energy in enforcing sanitary laws in Benares. Of 96 Europeans tried in the North-West Provinces, 44 were convicted. The percentage of convictions fell from 52 to 50·5 per cent. in the North-West Provinces, and from 47·61 to 44·16 in Oudh. The lowness of these percentages is attributed principally to the large number of petty thefts and other trivial offences coming before the lowest class of magistrates. One hundred and fifty-eight trials by jury were held during the year. The judge accepted the verdict in 136 cases, while in 15 he made a reference to the High Court or Judicial Commissioner, with the result that in six of the 10 cases disposed of by the end of the year the verdict was set aside or modified. The appeals and revision cases disposed of by all courts amounted to 25,064; 83 per cent. of the former and 69 per cent. of the latter were unsuccessful in the North-West Provinces, and 67 and 74 per cent. respectively in Oudh. All the sentences of death that came before the Judicial Commissioner in Oudh for confirmation were confirmed; and in the North-West Provinces 73 out of 95 were upheld by the High Court.

Punjab.

In the Punjab honorary magistrates, sitting in benches, dealt with 14,979 accused persons during the year, and sitting singly, with 16,549; but the percentage of convictions in the latter class of cases was only 26. District magistrates exercised their enhanced powers (Sections 30 & 34) in 806 cases, of which 316 were triable by Sessions Courts; 1,062 cases in the frontier districts were tried by Courts of Elders, and resulted in conviction in about 48 per cent. Of the total number of offences found true, 69 per cent. were under the Penal Code, and 31 per cent. under special and local laws. The percentage of convictions was 42, but in Penal Code cases only 28. Eighty-four Europeans were tried, more than half for crimes of violence, and 32 of these 84 were convicted. The number of appealable sentences passed was 65,230, and against about 30 per cent. appeals were presented. About 65 per cent. of the appeals were unsuccessful, the orders appealed against being confirmed. Of the applications made for revision about 76 per cent. were rejected. Of 177 capital sentences passed, 79 were confirmed by the Chief Court, 31 were varied, and 39 reversed; the remainder were not disposed of before the end of the year.

Burma.

In Lower Burma the highest court of appeal is the Special Court, consisting of the Recorder and Judicial Commissioner sitting together. Honorary magistrates did less work in 1892 than in previous years,—especially in Akyab and Henzada, where certain changes had been made in the system. Owing to an increase in the graver forms of crime there was a large increase in every description of punishment awarded except fines and whipping. Death sentences rose from 30 to 49, though no special cause for this large increase is assigned. Under the Penal Code convictions before magistrates were obtained in 49 per cent. of the cases tried, and before Sessions Courts in 60 per cent. Stricter rules regarding the evidence necessary for requiring security for good behaviour caused a large decrease in the number of persons bound over. The number of appeals to subordinate courts was slightly less than in the previous year; 79 per cent. of appeals to the Recorder and the Judicial Commissioner were unsuccessful; and out of 39 appeals to the Special Court, 35 failed.

In Upper Burma the highest court of appeal is the Judicial Commissioner. The number of cases disposed of by honorary magistrates rose from 299 in 1891 to 2,262. The work of the year was generally disposed of in a satisfactory manner. More cases came up for trial than in the previous year, owing to the progress of administration, but the number of the more serious offences declined. There appears to have been some carelessness in the preparation of evidence for the prosecution in cases before magistrates, which resulted in a falling off in the percentage of convictions. There were few appeals to the subordinate courts, and only 29 per cent. of these were successful. Of appeals to the Judicial Commissioner 75 per cent. were unsuccessful.

Satisfactory

Satisfactory work was done in the Central Provinces by honorary magistrates, who disposed of about 30 per cent. of the total number of magistrates' cases. The fall in the proportion of convictions obtained has engaged the attention of the authorities, and steps are being taken to secure the better management of prosecutions. The Courts of Session were somewhat overweighted, and a proposal to increase the number of Sessions Judges was under consideration. The year was normal as regards the total number of cases tried, but offences against property, as already noticed, were unusually numerous. The large majority, however, were not of a heinous nature. Whipping was to a considerable extent substituted in the year under review for short terms of imprisonment, but a more deterrent scale of punishments is reported to be required throughout the province. The number of appeals disposed of by all courts was 2,897, of which 68·9 per cent. were unsuccessful. CRIMINAL JUSTICE. Central Provinces.

The system of employing honorary magistrates received no further development in Assam during 1892. There were no benches, but in most districts some work was done by honorary magistrates sitting singly. The number of Penal Code cases was slightly in excess of that in 1891, chiefly in respect of crimes of violence. The percentage of convictions (62·3) was greater than in any of the preceding five years. Eighteen Europeans (out of 36 tried) were convicted, chiefly of assault; 18 cases were tried by jury, only one of which was referred to the High Court by the judge; appeals were lodged against 31 per cent. of the appealable sentences passed, and 61 per cent. of the appeals failed. The orders of lower courts were upheld on revision in 57·6 per cent. of decided cases, and reversed in only 25·4 per cent. Assam.

The work done by honorary magistrates in Berar (5·9 per cent. of the cases disposed of by magistrates), though slightly less than in 1891, was on the whole satisfactory. The chief shortcoming in the administration of justice was the scanty use of the powers to exact security for good behaviour. Owing to pressure of business in the Sessions Courts, much sessions work had to be disposed of by district magistrates under their enhanced powers. The percentage of convictions was only 39. Of appeals to all courts, 52 per cent. failed; and of sentences revised by superior courts, 48 per cent. were left undisturbed. Berar.

About 4 per cent. of the criminal business in Madras is done by village magistrates, but an increased tendency was shown in the present year towards their displacement by honorary and lower-grade stipendiary magistrates. Owing to the bad season cases under the Penal Code showed a further increase of 8·2 per cent. on the high figures of the previous year. The advance in the percentage of convictions in magistrates' courts, which began in 1889, was still maintained, and reached 43. There was a large increase in the work done by the Sessions Courts; 470 cases were tried by jury, in 93 per cent. of which the judge accepted the verdict. The sentences inflicted by the courts in general showed a tendency towards heavier fines and longer sentences of imprisonment; also towards the more frequent infliction of whipping, especially in the case of juvenile offenders. About 10 per cent. of appealable sentences were appealed against, and about 55 per cent. of the appellants failed. Of sentences revised by superior courts, about 69 per cent. were not interfered with; but, out of 61 capital sentences, only 30 were confirmed by the High Court. Madras.

In Bombay there were, in the Presidency proper, only 67 honorary magistrates, and in Sind, none. Of these magistrates, 41 were distributed into eight benches, the remainder sitting singly. In magistrates' courts the percentage of convictions was rather less than 36, a decrease as compared with 1891. The increase in the number of true cases was due partly to the occurrence of more crimes of violence, but principally to greater activity in enforcing local and special laws. In Sessions Courts the percentage of convictions was 43; while in the High Court, on its original side, it was 82; 38 cases were tried by jury in the High Court, and 174 in Sessions Courts. Of the latter, 10 were referred to the High Court, which set aside the verdict in four cases out of seven heard by the end of the year. There was Bombay.

CRIMINAL JUSTICE

a small increase in the number of appeals. In the High Court 80·44 per cent., and in subordinate courts about 66 per cent., were unsuccessful.

In revision, the High Court left the sentence undisturbed in 62 per cent., Sessions Courts in 69 per cent., and District Magistrates' Courts in 77 per cent., of the cases that came before them.

## JAILS.

JAILS.

Prisoners of all kinds.

At the beginning of the year 1892 the jail population in British India was 95,616. During the year 437,395 prisoners were admitted, 437,843 were discharged, and the year closed with a jail population of 95,168, the daily average being 96,202. The average daily number of female prisoners was about three per cent. of the whole, but the percentage of females admitted and discharged within the year was about five.

Convicts.

The convict population at the beginning of the year numbered 88,429; 183,684 convicts were received during the year, and 179,732 were discharged. The number of convicts undergoing sentence at the end of the year was 88,570, and the average daily number throughout the year was 88,801. The average proportion of female to male convicts was a little over three per cent. The number of convicts deported to the Andamans, or from Burma to Indian jails, shows a steady decrease, owing to (1) the retention in India of all but life-convicts,

Guarding of prisoners.

and (2) the pacification of Burma. Two serious outbreaks of convicts occurred during the year, at Akola in Berar and at Akyat in Burma, neither being suppressed without some loss of life. The number of prisoners who effected their escape was again high, especially in Madras, where it is ascribed to the removal of fetters from extra-mural gangs; a discretion has now been granted to the jail authorities to order the use of light fetters for such gangs.

Religion and nationality.

The proportions of convicts in each class to the total population of that class were as follows:—Buddhists and Jains, 1·4 per cent.; Native Christians, 1; Muhammadans, ·8; Hindus and Sikhs, ·5; all other classes, ·3.

Age.

By far the greatest number of convicts were from 16 to 40 years of age, viz., 147,394; from 40 to 60 years of age, there were 30,918; over 60 years, 3,144; and under 16 years, 2,232.

Reformatories.

The total number of juveniles in reformatory schools at the end of the year was 1,029, as compared with 926 at the end of the previous year. The working of these institutions was in the main satisfactory, and so were the reports on the lads who had been discharged from them.

Education.

About 80 per cent. of the convicts imprisoned during the year were illiterate, and not quite 3 per cent. could read and write well. The endeavour to educate adult convicts were abandoned, and attempts at education in jails were restricted to such prisoners, under the age of 18, as were not transferred to reformatory schools. These were instructed, not only in reading and writing, but also, where possible, in some simple handicraft.

Employment previous to conviction.

There was a large increase in the number of men engaged in agricultural pursuits who were admitted to prison during the year; the figures relating to other employments are normal. In the case of female convicts, the largest actual increase in the number of admissions occurred amongst married women and widows; the largest proportionate increase amongst those returned as unmarried, although most Indian girls are married at a very early age.

Sentences.

The percentage of convicts admitted for terms not exceeding one month was 37 against 35·77 in 1891; from one to three months, 19·67 against 19·44 in 1891; from three to six months, 17·27 against 17·55 in 1891; from six to 12 months, 12·85 against 13·26 in 1891; from one to two years, 7·40 against 7·97 in 1891; two to five years, 3·62 against 3·61 in 1891; five to 10 years, ·99 (the same as in 1891); and exceeding 10 years, ·05 against ·06 in 1891. That of convicts sentenced to transportation for life was ·49 against ·62 in 1891, and to transportation for a term of years, ·35 against ·43 in 1891. The number sentenced to death was ·31, as compared with ·30 in 1891. The increase, therefore, took place chiefly among prisoners whose sentences did not exceed one month, these being more than one-third of the whole

whole number of convicts; and in the case of 86·79 of the convicts admitted the sentences did not exceed one year. JAILS.

Up to the end of the year the attempts made to secure the recognition of habitual offenders had not led to very encouraging results. In Madras the Bertillon system of anthropometry was being introduced, but had not been brought into working order. In Bombay there was a large increase in the number of prisoners classified as habitual, but it is not clear what system of identification was employed. In Bengal further progress was made in the use of the anthropometrical system, but no reconviction was proved by its help during the year. In the North-Western Provinces and Oudh, the Punjab, and Assam, steps were being taken to introduce the Bertillon system, which had been attended with satisfactory results in Burma. Habitual offenders.

The number of prisoners available for labour averaged 74,244; about 45 per cent. were employed on manufactures, and about 16 per cent. in the preparation of articles for consumption in jails; 5·7 per cent. were employed as prison officers; and the remainder as prison servants, in gardening, on jail repairs, or on outside labour. In connection with the Lucknow jail a dairy was started with good results, and a similar experiment was being tried in Lower Bengal. Jail employments.

There was a large increase of 11 per cent. in the number of recorded offences committed by convicts—from 99,601 in 1891 to 112,857 in 1892. Criminal offences rose about 8 per cent., but the principal increase was in offences relating to work and prison discipline; 576 convicts were sentenced to further punishment by criminal courts, as compared with 528 in the previous year, and punishments by prison officers increased by 13,200. Except in Burma, where some of the jails were very large and the prisoners appear to be more refractory than in other provinces, there was a decrease in the number of punishments by solitary confinement with reduced diet. In the absence of a uniform method of recording jail offences and punishments, no reasonable comparison can be made between the discipline enforced and the punishments awarded in various provinces. This subject was receiving the attention of the Government of India, and a draft Bill for securing some uniformity of system was under consideration. Meanwhile, instructions had been given that all reported offences, however trivial, must be recorded, and this accounts for the marked rise in their number. Prison offences.

There was an increase in the number of convicts who earned remission under the mark system, as compared with the previous year; and, of those released during the year, only 34 had failed to earn remission, one man having earned in the course of a long imprisonment as much as 1,374 days. The maximum gratuity earned by a prisoner discharged during the year was Rs. 28 (as compared with Rs. 50 in 1891); but it is now recognised that what is needed, is not so much a system whereby prisoners may earn a money reward, rather than marks counting towards a substantial remission of sentence, as one securing to indigent prisoners, on their release, a sufficient subsistence allowance to enable them to reach their homes. Mark system.

The gross expenditure on jails rose from Rx. 547,804 in 1891 to Rx. 584,321 in 1892. The largest increase occurs under the head of "Rations," the cost of rations per head having risen from Rs. 25·12 in 1891 to Rs. 27·255. The cost of establishments, which had been Rx. 193,799 in 1891, rose to Rx. 196,168. Steps were being gradually taken to substitute warders for police guards in those provinces where the change had not already taken effect. Hospital charges also increased—principally in Bengal, where they amounted to Rs. 2. 12. 6. per head of the average daily strength. Cost of maintenance.

The total cash earnings of prisoners were less than in the previous year by Rx. 11,990, but from this sum should be deducted about Rx. 1,802 which were earned, but not brought to audit, in the Central Provinces.

The net expenditure on jails was Rx. 459,178, as compared with Rx. 410,671 in 1891, and the net cost per head averaged Rs. 59. 9. 5., being lowest in Burma (Rs. 45. 15. 3.), and highest in the Central Provinces (Rs. 65. 5. 9.), owing to the outstanding earnings above alluded to.

JAILS.
Mortality and health.

On the whole, the health of the jail population, which had improved in 1891, fell back considerably in 1892. The admissions into hospital rose from 978·57 per mille in 1891 to 1,116·87; the daily average number of sick from 33·60 to 37·94; and deaths from 30·19 to 35·94. Bowel complaints and cholera were, as usual, the principal causes of death, but fevers were less fatal than in the previous year. In Madras, the Central Provinces, and Burma, the increase in the death-rate is ascribed to the prevalence of cholera. In Bombay, the rise was caused by the abnormal mortality in the jails of Sind, and notably in that at Shikarpur where it exceeded 116 per mille. A proposal to remove this jail to a more healthy situation at Sakkar was under consideration. In Bengal, the high death-rate was attributable to the general unhealthiness of the year and the high price of food-grains, which caused a number of criminals to be admitted in a weakly condition. In the remaining Provinces the death-rate was not abnormally high. The death-rate in jails compared unfavourably with that of the free population in all Provinces, except the North-West Provinces and Oudh, the Punjab, Coorg and Berar, but it should be remembered that, whereas the jail returns are absolutely accurate, the registration of vital statistics among the free population is still very defective.

## CIVIL JUSTICE.

CIVIL JUSTICE.

The general system of administration of Civil Justice in both Regulation and Non-Regulation Provinces is fully described in previous reports, and no important alterations were made in the year under review.

Bengal.

For the last 20 years there has been in Bengal a gradual increase of litigation of all kinds, and this has been specially marked in the year under review. The rise in the number of rent-suits (made cognizable by Civil Courts in 1870) was fully maintained in 1892 and accounts for a large part of the total increase. The business of the Civil Courts has also been considerably enhanced by the growing number of "miscellaneous" cases, which often require as much time as regular suits. Existing Courts had for several years been unable to cope with the increasing work, and, as a temporary expedient, many additional munsifs had been employed. After an exhaustive discussion as to the amount of help really required, the judicial staff was permanently augmented in 1892 by the addition of four subordinate judges, and 55 munsifs. Appellate business increased considerably, but not in proportion to original work, a fact which is probably attributable to the extension of the system of summary trial under the Small Cause Court procedure in suits for money or moveables. The accumulation of arrears in many Courts continued to be a difficulty, and a scheme for the improvement of the ministerial establishments was under consideration.

North-West Provinces and Oudh.

In the North-West Provinces the decline in litigation which had been noticed in the previous four years, ceased in 1892, and the number of cases instituted approached very nearly to the figure for 1889. This result is ascribed to the more favourable harvests of the year. In Oudh there was a small decrease as compared with the previous year. A satisfactory feature of the report for the North-West Provinces is that there were only three suits relating to religion and caste; the tendency has been for this class of suit to become rarer every year. Material assistance was afforded to the Civil Courts in Oudh by Honorary Assistant Commissioners, who disposed of 9·6 per cent. of the total number of suits instituted. Both in the North-West Provinces and in Oudh the Courts were somewhat overtasked, and considerable arrears accumulated, especially in appellate business.

Punjab.

In the Punjab the large decrease in the number of suits instituted in 1892 as compared with the average of the previous four years, is ascribed to the prevalence of cholera and fever over large areas, and to the scarcity which existed in some districts. The number of suits referred to arbitration continued to decline—a fact which is variously attributed to the unpopularity of the provisions of the law, to the increased bitterness of feeling engendered by litigation, and to the absence of anything like official pressure or even encouragement. Great improvement has been effected in the distribution of

of civil business, and land suits are now more largely tried by the lower grade of officers. A satisfactory share of attention was given by Divisional and District Judges to the duty of inspecting subordinate Courts. CIVIL JUSTICE.

In Lower Burma there was a large increase of civil litigation, which was mainly due to the high price of rice in the dry season of 1892, and the consequent rise in the value of land. The result was that the Courts were unable to keep pace with the business. and the number of original cases pending was considerably great erat the end of the year than at its beginning. The increase also extended to appeals, and here the assistance of an additional Sessions Judge for the Pegu and Irrawaddy Division enabled the Appellate Courts to prevent any large accumulation of arrears. The small proportion (51 per cent.) of confirmations on appeal to the Judicial Commissioner does not seem creditable to the lower Courts. Burma.

In Upper Burma the number of suits instituted continued to increase, especially suits between former and present occupiers in respect of land in the drier districts, which had greatly risen in value. The same thing had been observed in Lower Burma, when the delta of the Irrawaddy began to be opened up to supply rice for the export trade. The percentage of confirmations by the Judicial Commissioner on appeal was no better than in Lower Burma.

In the Central Provinces the year 1891 had been an exceptional one in respect of the small number of suits instituted, but in 1892 the number exceeded the average of the previous seven years. The increase occurred in suits of all values, except in those under Rs. 10, but is particularly noticeable in the more valuable classes. The reasons assigned for these changes are (1) the growth of trade and rise in standard of expenditure; and (2) the wider recognition by creditors of the trouble and expense involved in enforcing petty claims. The number of appeals was normal, and a considerable portion of this class of business was transferred from the Deputy Commissioners to newly-established Courts of Judges. The results of the disposal of appeals do not indicate any material variation from 1891. There was some slackness of supervision over subordinate Courts by Deputy Commissioners. Central Provinces.

The number of civil suits instituted in Assam in 1892 was slightly greater than in 1891, but both these years show a considerable decline as compared with the eight preceding years. As in Bengal, however, the number of rent-suits increased, and there were also more suits involving disputes as to title. In Sylhet the number of original suits was smaller than in 1891, owing partly to an outbreak of cholera and failure of the crops, and partly to settlement operations. The average value of suits for money was Rs. 84·4, of rent-suits, Rs. 25·4, and of title and other suits Rs. 681·6, as compared with Rs. 96·4, 50·4, and 131·1, respectively, in 1891. The decrease in the value of the suits occurred in the Assam Valley and Cachar districts, but the returns from Sylhet account for the large increase as regards suits involving title, several suits of an unusually high value having been brought under the Jhum Regulation. Compared with the returns for 1891, the result of appeals was very favourable to Courts of First Instance in Sylhet, where the percentage of decisions upheld was 80·8; in Cachar it was 63·6, and in the Assam Valley Districts, 58·8. Assam.

The volume of work which came before the Civil Courts in the Hyderabad Assigned Districts in 1892 was unusually large, and about 88·7 per cent. of the whole number of cases were disposed of within the year, or nearly 5,000 more than in the previous year. The Judicial Staff was nominally stronger by three Assistant Commissioners than in 1891, but the officers newly added were unable to give much assistance during the year. There was nothing special in the character of the litigation, which related chiefly to small loans for agricultural purposes. Nearly 75 per cent. of the cases which came to a hearing were disposed of without a contest. The result of appeals was, on the whole, creditable to the lower Courts, about 73 per cent. of their decisions being confirmed. Berar.

In Madras four important changes in the judicial administration were effected during the year, viz.:—(1) The establishment of the Madras City Civil Court; (2) the permanent addition of six District Munsifs' Courts; (3) a regrading of the staff of district munsifs; and (4) the opening of the Madras.

CIVIL JUSTICE.

new Law Courts at Madras. The amount of civil original litigation reached the highest figure it has ever attained in every class of Court except the Cantonment Courts of Small Causes, and the Revenue and District Courts. Varying, and in some respects conflicting, reasons are given for this increase, but it is probable that it is connected with the falling off in 1891 for the first time since 1887, and that many suits which might have been filed in that year were held over till the present year. A similar result is shown in the figures relating to appellate litigation. A satisfactory increase is shown in the work disposed of by all classes of Courts, except District Courts in which pressure of criminal business caused a slight falling off. In the High Court a continuance of the growth of the original work, and a decline in the appellate work, are the salient features of the year's report. In about 65 per cent. of the appeals preferred during the year the decisions of the lower Courts were affirmed.

Bombay.

In the Presidency proper there was a large increase in the number of suits instituted in 1892 as compared with the previous year, and it was distributed amongst all classes of tribunals except the District Courts. In Khandesh, where the rise was most remarkable, it is attributed partly to a good outturn of the crops and partly to the apprehension on the part of the money-lenders that the Dekkhan Agriculturists Relief Act would be extended to that district. In Sind there was a decrease in litigation. Though a larger amount of work was disposed of by all Courts in the Presidency than in the previous year, the arrears were heavier at the close of the year. The number of appeals was slightly in excess of those in 1891.

Two subordinate Judges were added during the year to the staff employed under the Dekkhan Agriculturists Relief Act, and there was a substantial increase in the number of proceedings under that Act as compared with 1891, in which, however, abnormally few cases were instituted. About 51 per cent. of the cases concerned agriculturists only. The report of the Commission appointed to inquire into the working of this Act was submitted to the Government of India during 1892.

## IV.

## REGISTRATION.

In a previous Statement was given a short account of the Registration law. It will suffice to say here that the law makes compulsory the registration of all non-testamentary documents affecting immovable property of the value of Rx. 10 or upwards, while it permits the optional registration of other documents. Officers are established in every district for the registration of documents and for keeping copies of such documents. *Ad valorem* fees are charged for registration, and a small fixed fee for searching the records. At the end of 1892–93 there were in the British India 1,899 registration offices; the total number of documents registered during the year was 2,739,510, or twenty-four per cent. more than in 1890–91. The total registration fee receipts of the year 1892–93 were Rx. 430,064, as compared with Rx. 398,000 in the preceding year; and the cost of the registration offices was Rx. 213,116, leaving a surplus after allowing for refunds of Rx. 225,550 against Rx. 190,000 in the year 1891–92. It is claimed for the Indian registration system that it operates to prevent fraud, as well as to secure and simplify titles. REGISTRATION. General.

The number of registration offices in Bengal increased from 333 to 346. The total number of documents registered was 1,102,321, against 988,463 in 1891–92. The increase occurred under documents of which registration is optional, as well under those for which it is compulsory; 85 per cent. of all the documents brought for registration related to immovable property. The number of registered transfers of holding by ryots (tenants), paying at fixed rates or enjoying occupancy right, rose from 88,337 in 1887–88, and 141,296 in 1891–92, to 168,999 in 1892-93; the transfer was made in 101,220 cases to other ryots, in 24,016 to traders or money-lenders, and in 4,473 cases to landords of the land transferred. The average area of a fixed rent holding was 1·9 acres, with a price equal to 13·9 times the rental; while the average occupancy right holding had an area of 1·7 acres, and fetched 13½ years' purchase of the rental; the average area is smaller and the price higher in each case than in the year 1891–92. The number of ceremonies registered under the Muhammadan Marriage Act rose from 10,176 to 12,175, the highest number since the law was passed. The Act is in force in 19 districts, as compared with 14 districts in the years 1876–91. The total fee receipts from all registrations were Rx. 143,500, or 7 per cent. larger than in the previous year; the expenditure increased from Rx. 68,400 to Rx. 72,600; and the surplus increased by Rx. 5,900 to Rx. 70,800. Bengal.

The total number of documents registered in the year 1892–93 in the North-West Provinces and Oudh was 207,162, which showed a decrease of 798, or ⅓ per cent., in the number of documents registered as compared with the previous year. The decrease occurred entirely under documents for which registration was optional. The number of registration offices open in the combined Provinces at the end of the year was 339, against 343 in the previous year; 233 out of the 309 sub-registrars are either special officers or non-officials. In large towns there is clear ground for thinking that the special officers serve the public better than *ex-officio* registrars, who perform registration duties in addition to their other work; but in smaller places remote from supervision where sub-divisional officers are less busy and the work is less heavy, the superiority of the special registrars is less clear. In Oudh where all sub-registrars are special officers registration is less popular and less efficiently done than in the Nort-West Provinces. There was an increase of 2 per cent. in the registration receipts as compared with 1891–92. The surplus of receipts over expenditure was Rx. 19,000, compared with Rx. 19,600 in the previous year. The number of mortages registered showed an increase of 3 per cent. as compared with the last three years; the number of leases declined 6 per cent. during the same period; sales of land increased 7 per cent., and the total number of wills registered in the year fell from 32 to 22. The number of documents relating to movable property for which registration was optional, was, North-West Provinces and Oudh.

REGISTRATION.

during the past three years, 48,722, 46,616 and 46,538 respectively. The total value of the property regarding which documents were registered during the year was Rx. 9,089,000, or Rx. 473,000 more than in the previous year. Prosecutions for breach of the registration law rose from two to eight.

Punjab.

The number of registration offices was 258, or 14 more than at the end of the previous year. The total number of documents registered in the Punjab was 127,146, or 22 per cent. above the previous year's total, while the fee receipts increased by 27 per cent., and the surplus of the Department by 35 per cent. The increase of business was chiefly due to decisions of the courts to the effect that titles to immovable property are liable to be insecure without registration; the number of optional registrations was about one quarter of the total. The chief increase in the year's registrations was under the head of mortgages of land, which rose in one year from 55,053 to 76,410. Even now the registered transfers of land are less than half the number of transfers shown in the returns of the Revenue Department. The total value of property to which registered documents related was Rx. 4,981,000, or Rx. 643,000 more than in the preceding year. The registration receipts rose to Rx. 32,339, and the surplus to Rx. 21,182.

Burma.

The number of registration offices in Lower Burma rose to 120, three new offices having been opened during the year; and the number of registrations increased from 10,822 in 1889–90 to 17,369. The aggregate value of all property registered was Rx. 2,178,000, or 43 per cent. larger than in 1891–92. The fee receipts rose from Rx. 4,027 in the previous year to Rx. 5,475. The surplus of receipts over expenditure was Rx. 2,215 against Rx. 1,190 in the previous year.

Twenty registration offices were open in Upper Burma, four having been added during the year; 2,402 documents were registered, or 303 more than in the previous year. As yet the provisions of the law are imperfectly known in Upper Burma outside Mandalay and a few marts on the Irrawaddy.

Central Provinces.

The number of registration offices was 86, against 84 in the previous year, and the number of documents registered during the year in the Central Provinces was 31,103, or 4½ per cent. more than in the preceding year. The increase was proportionately the same under compulsory and optional registrations. The value of the property concerned was Rx. 1,025,000. Of the documents registered 75 per cent. were of classes for which registration is compulsory. The cost of the Registration Department was 43 per cent. of the receipts, and the net revenue was Rx. 6,371, as compared with Rx. 6,814 in the preceding year.

Assam.

In Assam there were 24 registration offices, of which three were opened during the year; 30,993 documents were registered, or 295 more than the total of the preceding year; 78 per cent. were compulsory registrations, a slightly smaller proportion than in 1891. The value of the property registered rose to Rx. 425,000 from Rx. 415,000 in the previous year. The fee receipts were Rx. 4,429, and the expenditure was Rx. 2,420, leaving a surplus of Rx. 2,009, which is larger than the surplus in any preceding year.

The marriages registered under the Muhammadan Marriage Act were 317, as compared with 592 in the preceding year; the number of these marriage registrations in Assam has been decreasing rapidly during the past two years.

Berar.

The number of registration offices in Berar was 63, as at the end of the previous year; the number of documents registered was 31,162, or 8 per cent. more than in the previous year, but slightly fewer than in 1889–90, in which year there had been a sudden and abnormal increase of 12 per cent. The value of the property registered was Rx. 921,000, or 15 per cent. larger than in the previous year; the fee receipts increased 7 per cent. but the expenditure rose 25 per cent., and the surplus decreased 15 per cent. The increase of expenditure, and consequent diminution of the surplus, were due to the substitution of special paid sub-registrars for several of the *ex-officio* sub-registrars.

Madras.

Ten new registration offices were opened in Madras, bringing up the total to 398. The number of documents registered was 873,161, showing an increase of 8 per cent. over the previous year. The increase was 11 per cent. in documents of which registration was compulsory, and 5 per cent. in optional

optional registrations. The total value of the property concerned in all the registrations was 17¾ millions, against 15¾ million Rx. in the preceding year. The registration receipts were Rx. 131,478; the expenditure was Rx. 83,316, and the surplus was Rx. 48,162, or 36 per cent. more than in the previous year. The ratio of increase was larger under compulsory than under optional registrations. The number of documents of which registrations was refused rose from 2,042 to 2,090. In Madras, registrations are, with reference to the population, twice as numerous as in Bengal, and four times as numerous as in the North-West Provinces. The Registrar General, an accomplished Hindoo gentlemen, has subjected the registration results of Madras during the past 12 years to a detailed review. He considers that the registration statistics show that the demand for land is increasing rather than declining; that the price of land is rising, especially in the irrigated districts and in tracts into which railways have recently penetrated; that the rate of interest on borrowed money is slowing falling; that petty landholders are less dependent than formerly on professional money-lenders; that loans between one agriculturist and another are more common than they were; that the transactions of mutual credit societies composed of villagers are extending in three or four districts; and that the ownership of land is not passing from the agricultural to the non-agricultural classes to any injurious extent. REGISTRATION.

The number of registry offices in Bombay was 245, or the same as in the previous year. The number of registrations was 177,170, or 5 per cent. larger than in 1891–92. The increase took place mainly under compulsory registrations. The value of the property affected was Rx. 8,870,000. The fee receipts were Rx. 51,288. The registration surplus of the year, under all heads, was Rx. 24,843, as compared with Rx. 21,718 in the year 1891–92. BOMBAY.

Under the special law for the protection of Dekkhan agriculturists in the four districts of Poona, Sattara, Ahmadnagar, and Sholapur, there were 137,521 registrations, or 8 per cent. above the total of the previous year. Of the registered sales, leases, and mortgages of land, 46 per cent., or almost the same proportion as in the previous year, were between agriculturists on both sides, and 54 per cent. between agriculturists and money-lenders. The aggregate value of property concerned in these special registrations was Rx. 702,000, or 8 per cent. more than in the previous year. There was an increase in the fee receipts; and the net deficit on these registration proceedings was Rx. 791, as compared with Rx. 1,181 in the preceding year, and over Rx. 1,600 in earlier years.

## JOINT STOCK COMPANIES.

During the year 1892–93, for all Provinces of India, the number of new joint stock companies registered was 71, with a nominal capital of Rx. 3,602,000; and at the end of the year there were in operation 956 companies, with a nominal capital of Rx. 35,372,000, and a paid-up capital of Rx. 26,585,000. Sixty-nine companies ceased to work during the year. The total paid-up capital of all surviving companies had increased by about Rx. 2,000,000 in the two years 1891–93. The companies work chiefly in the Provinces of Bengal and Bombay; in no other Province did the aggregate paid-up capital of registered companies reach two millions. The distribution of paid-up capital among registered companies for different classes of industry was somewhat as follows:— JOINT STOCK COMPANIES.

| | Rx. of Paid-up Capital. | | Rx. of Paid-up Capital. |
|---|---|---|---|
| Banking and insurance - | 3,829,000 | Mills and presses - - | 12,285,000 |
| Trading and shipping - | 3,825,000 | Tea and planting - - | 3,770,000 |
| Mining and quarrying - | 1,161,000 | | |
| Brewery companies - - | 169,000 | Miscellaneous - - - | 936,000 |

The companies with the largest aggregate subscribed capital, Rx 12,285,000, were for weaving and spinning or for pressing cotton, jute, wool and silk, and more

JOINT STOCK COMPANIES.

more than two-thirds of the capital of such undertakings belonged to the Bombay Presidency. The capital invested in mills increased by less than one per cent. during the year, and the capital in mining increased by $2\frac{3}{4}$ per cent.; capital invested in tea showed a small decrease; and on the whole there was hardly any expansion of joint-stock enterprise during the year.

Bengal.

In Bengal, 20 new companies were registered, with a nominal capital of Rx. 393,000. Nineteen companies, with a total nominal capital of Rx. 1,124,000, ceased to work. At the end of the year 1892–93 there were 325 registered joint-stock companies at work with a paid-up capital of Rx. 11,910,000.

Bombay.

In Bombay, 20 new companies were registered, with a nominal capital of Rx. 448,000. Thirteen companies went into liquidation, with a registered capital of Rx. 466,000. At the end of the year 233 joint-stock companies were in existence, with a paid-up capital of Rx. 10,674,000. Of these, 148 companies, with a paid-up capital of Rx. 8,289,000, were working cotton mills and presses.

V.



# FINANCE.

[*The denomination* Rx. *means tens of rupees.*]

THE gross revenue and expenditure of British India in 1892–93 may be thus compared with the figures for 1891–92 :—

| | 1891–92. | 1892–93. | Increase. | Decrease. |
|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. |
| Revenue - - - - - - | 89,143,283 | 90,172,438 | 1,029,155 | — |
| Expenditure - - - - - - | 88,675,748 | 91,005,850 | 2,330,102 | — |
| Surplus - - - | 467,535 | — | Result worse by - - Rx. 1,300,947 | |
| Deficit - - - | — | 833,412 | | |

In the gross revenue are included very large receipts, amounting altogether to little less than one-third of the whole, which (being derived from the working of the railways and canals, the operations of the Postal and Telegraph Departments, the interest received on loans to municipalities, landholders, &c., and on the investments of the Currency Department, the seignorage on coinage, the contributions by officers towards their pensions, the sale of stores, and the receipts of the various administrative departments), are rather of the nature of a set-off against the corresponding charges than revenue proper; and, on the other hand, there are included in the expenditure, firstly, one set of charges which must be regarded as a direct set-off against corresponding items of income, viz., the cost of collection of revenue; and, secondly, two very variable charges, viz., (1) that which is incurred for the production of opium, and is subject to variations caused by the state of the season and of trade, and (2) that which is incurred for the establishment and maintenance of public works, and necessarily increases as more works are brought into operation. The financial position of the Government can, therefore, be much better appreciated by looking at the net revenue and expenditure, a statement of which is regularly appended to the Financial Statement annually laid before Parliament.* The following is the comparison of the net revenue, *i. t.*, of the gross revenue after the deduction of the cost of collection and other direct demands, with the net expenditure, *i. t.*, the expenditure after the deduction of the various departmental receipts :—

NET REVENUE.

| REVENUE. | 1891–92. | | | | 1892–93. | | | | NET REVENUE. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Revenue. | Deductions. | | Net Revenue. | Gross Revenue. | Deductions. | | Net Revenue. | Increase. | Decrease. |
| | | Refunds and Drawbacks. | Charges in respect of Collection. | | | Refunds and Drawbacks. | Charges in respect of Collection. | | | |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue - - | 23,965,774 | 64,490 | 3,835,126 | 20,066,158 | 24,905,328 | 55,000 | 3,936,345 | 20,913,983 | 847,825 | — |
| Opium - - - - | 8,012,380 | 13 | 1,861,813 | 6,150,555 | 7,993,180 | 135 | 1,602,496 | 6,390,549 | 239,994 | — |
| Salt - - - - - | 8,636,182 | 38,112 | 459,034 | 8,139,036 | 8,656,104 | 29,986 | 458,707 | 8,167,411 | 28,375 | — |
| Stamps - - - | 4,262,156 | 47,198 | 138,447 | 4,076,511 | 4,448,540 | 53,744 | 141,264 | 4,253,532 | 177,021 | — |
| Excise - - - - | 5,117,264 | 30,355 | 190,097 | 4,896,812 | 5,242,443 | 32,240 | 193,013 | 5,017,190 | 120,378 | — |
| Provincial Rates - - | 3,502,837 | 5,463 | 58,703 | 3,438,671 | 3,706,498 | 7,849 | 55,659 | 3,642,990 | 204,319 | — |
| Customs - - - | 1,701,288 | 46,977 | 136,363 | 1,517,948 | 1,617,633 | 58,836 | 140,634 | 1,418,163 | — | 99,785 |
| Assessed Taxes - - | 1,652,823 | 14,726 | 29,577 | 1,608,520 | 1,686,141 | 15,615 | 30,171 | 1,640,355 | 31,835 | — |
| Forest - - - - | 1,490,582 | 5,657 | 843,926 | 640,999 | 1,591,332 | 2,485 | 865,225 | 723,622 | 82,623 | — |
| Registration - - | 399,802 | 1,363 | 207,863 | 190,576 | 430,064 | 1,398 | 213,116 | 215,550 | 24,974 | — |
| Tributes from Native States. | 775,961 | — | — | 775,961 | 790,112 | — | — | 790,112 | 14,151 | — |
| | 59,517,049 | 254,353 | 7,760,949 | 51,501,747 | 61,067,375 | 257,288 | 7,636,630 | 53,173,457 | 1,671,710 | — |
| *Deduct*,— Assignments and Compensations. | — | — | — | 1,531,860 | — | — | — | 1,567,776 | 35,916 | — |
| TOTAL NET REVENUE - | — | — | — | 49,969,887 | — | — | — | 51,605,681 | 1,635,794 | — |

* *See* page 68 of Financial Statement for 1893–94 (Commons Paper, 207 of 1893), and the corresponding page of the Financial Statement for 1894–95.

FINANCE.

## NET EXPENDITURE.

| EXPENDITURE. | 1891-92. | | | 1892-93. | | | NET EXPENDITURE. | |
|---|---|---|---|---|---|---|---|---|
| | Gross Expenditure. | Receipts. | Net Expenditure. | Gross Expenditure. | Receipts. | Net Expenditure. | Increase. | Decrease. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Interest | 4,315,176 | 879,443 | 3,435,733 | 4,374,263 | 869,727 | 3,504,536 | 68,803 | — |
| Post Office, Telegraph, and Mint | 2,429,188 | 2,575,736 | *—146,548* | 2,505,625 | 2,736,953 | *—231,328* | — | 84,780 |
| Civil Departments | 13,853,842 | 1,656,157 | 12,197,685 | 14,259,912 | 1,607,876 | 12,652,036 | 454,351 | — |
| Miscellaneous Civil Charges | 5,046,622 | 897,284 | 4,149,338 | 5,537,840 | 876,994 | 4,660,846 | 511,508 | — |
| Famine Relief and Insurance | 1,268,319 | — | 1,268,319 | 1,116,103 | — | 1,116,103 | — | 152,216 |
| Construction of Railways (charged against Revenue, in addition to that under Famine Insurance). | 163,233 | — | 163,233 | 339,487 | — | 339,487 | 176,254 | — |
| Railway Revenue Account | 20,253,910 | 19,938,046 | 315,864 | 20,924,155 | 19,077,103 | 1,847,052 | 1,531,188 | — |
| Irrigation | 2,945,019 | 2,272,040 | 672,979 | 2,940,479 | 2,418,902 | 521,577 | — | 151,402 |
| Buildings and Roads | 6,208,752 | 627,124 | 5,581,628 | 5,846,480 | 653,188 | 5,193,292 | — | 388,336 |
| Army | 22,280,601 | 780,404 | 21,500,197 | 23,419,111 | 864,320 | 22,554,791 | 1,054,594 | — |
| Special Defence Works | 604,848 | — | 604,848 | 458,060 | — | 458,060 | — | 146,788 |
| | 79,369,510 | 29,626,234 | 49,743,276 | 81,721,515 | 29,105,063 | 52,616,452 | 2,873,176 | — |
| Provincial and Local Surpluses | — | — | — | — | — | — | — | — |
| " " " Deficits | — | — | 240,924 | — | — | 177,359 | 63,565 | — |
| TOTAL NET EXPENDITURE | — | — | 49,502,352 | — | — | 52,439,093 | 2,936,741 | — |

Thus, there was an increase of the net revenue by Rx. 1,635,794, and of the net expenditure by Rx. 2,936,741, making the result worse by Rx. 1,300,947, and turning the surplus of Rx. 467,535 in 1891-92, into a deficit of Rx. 833,412 in 1892-93. This is entirely attributable to the fall in exchange from 16·733*d.* per rupee in the former, to 14·985*d.* in the latter year, the effect being to increase the net charge for exchange by Rx. 2,869,567. Of this amount, Rx. 988,828 occurred in the Railway Revenue Account, Rx. 951,761 in the army charges, Rx. 328,640 in interest, Rx. 322,638 in Civil Superannuation, Rx. 116,807 under Marine, and Rx. 160,893 under other heads. Apart from Exchange, there was a net improvement of Rx. 1,568,620, the net revenue being better by Rx. 1,640,766, while the net expenditure was higher by Rx. 72,146. The increase in the net revenue occurred in all the principal heads except Customs, more than half being attributable to land revenue, which rose by Rx. 838,379; opium was better by Rx. 240,221; provincial rates by Rx. 206,705; stamps by Rx. 187,573; excise by Rx. 122,240; and other heads by Rx. 45,648. The increase in the net expenditure was the outcome of various changes; the railway revenue account was worse by Rx. 542,360, the net receipts on the State lines having been much less than in the previous year; the cost of the civil departments was enhanced by Rx. 273,918, much of which arose from heavy payments for the construction of vessels for the Marine Department; the charge for interest was less by Rx. 259,837, in consequence mainly of the lower payment for discount on a sterling loan; there was a reduction of Rx. 412,080 under buildings and roads; and of Rx. 72,215 under other heads.

In the tables in the Appendix, the net revenue and expenditure in India of the several provinces under the chief heads are shown for the years 1891-92 and 1892-93, to which is added a table of the net payments in England, with the loss by exchange thereon, the figures in all the tables combined resulting in the totals of net revenue and expenditure given above. The revenue

revenue and expenditure of Berar, which form no part of the general finances of the Government of India, are not given in this chapter, but are referred to under Hyderabad, in the chapter on Native States. The surplus revenue of the various Provinces, as shown in the Summary on page 182, defrayed the general charges in India and in England in approximately the following proportions: in 1891-92, Bengal, 38 per cent.; North West Provinces, 21; Bombay, 15; Punjab, 11; Madras, 7; Burma, 4; Central Provinces, 3, and Assam, 1; in 1892-93, Bengal, 41; North West Provinces, 20, and the Punjab, 9 per cent., the other Provinces contributing in the same proportion as in the previous year. FINANCE.

## CAPITAL OUTLAY ON PUBLIC WORKS.

The total capital outlay on railways and irrigation works, the expenditure in England being converted into Indian currency at the average rate obtained for the Secretary of State's bills during the year, was as follows:— Capital Outlay on Public Works.

| | 1891-92. | 1892-23. | Increase. | Decrease. |
|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. |
| Amount supplied by borrowing or from the Cash Balances, without being charged against the Revenue of the Year: | | | | |
| State Railways | 2,770,336 | 3,455,199 | 684,863 | — |
| Irrigation Works | 729,664 | 531,091 | — | 198,573 |
| TOTAL | 3,500,000 | 3,986,290 | 486,290 | — |
| Amount defrayed from Revenue: | | | | |
| Provincial Railways, &c. | 187,854 | † 339,487 | 619,227 | — |
| Protective Railways | 484,795 | 984,469 | | |
| Protective Irrigation Works | 77,931 | 60,793 | | |
| Other Irrigation Works* | 25,452 | 10,510 | | |
| TOTAL Direct Outlay by the State | 4,276,032 | 5,381,549 | 1,105,517 | — |
| In addition to this, the outlay by companies guaranteed or subsidised by the Government was | 1,300,229 | 1,309,000 | 8,771 | — |
| So that the TOTAL Outlay was | 5,576,261 | 6,690,549 | 1,114,288 | — |

* Excluding capital outlay on the minor works, against which interest is not charged in the Accounts.
† Including Rx. 201,225 contributed by Madras for the East Coast Railway.

## DEBT.

The following alterations were made in the amount of the debt in 1891-92 and 1892-93 respectively:— Debt.

| | 1891-92. | 1892-93. | Increase. | Decrease. |
|---|---|---|---|---|
| In India Rx. | —54,345 | 245,235 | 299,580 | — |
| In England £. | 2,995,935 | —720,376 | — | 3,716,311 |

FINANCE.

In 1891–92 no loan was raised for public works in India, and debt to the amount of Rx. 54,345 was discharged. In England a loan of 2,600,000*l.* India 3 per cent. Stock was issued, at an average price of 94*l.* 10*s.* 2½*d.* per cent., of which 1,597,394*l.* was applied to the discharge of India 3½ per cent. Debentures, and of debentures of the Oude and Rohilkund and South Indian Railways bearing the same rate of interest; the remainder was needed for advances to companies constructing railways in India under engagements with the Government. Later in the year there was an unexpected demand caused by the necessity of discharging certain guaranteed railway debentures, which the holders were unwilling to renew on the terms offered by the Government; owing to this reduction of the cash balance, and in order to be in a position to discharge 1,000,000*l.* Oude and Rohilkund Railway debentures falling due on the 1st of April 1892, it became necessary to sell a further amount of 2,000,000*l.* India 3 per cent. Stock. The total sterling debt raised was, therefore, 4,600,000*l.* at 3 per cent.; the amount discharged was 1,503,100*l.* debentures at 3½ per cent., and also 4,262*l.* of India stock at 4 per cent., and 96,703*l.* at 3½ per cent.; consequently the net increase was 2,995,935*l.*

In 1892-93, for the third time in succession, the Government of India was able to dispense with a public loan; but Rx. 250,000 was borrowed, at 4 per cent., from the Rampur State, towards the construction of a line of railway from Moradabad to Bareilly through Rampur; and, debt being discharged to the amount of Rx. 4,765, the net increase was Rx. 245,235. In England a loan of 1,300,000*l.* India 3 per cent. Stock, which was subscribed on the 29th of April 1892, at an average price of 96*l.* 18*s.* 4*d.* per cent., was issued for the discharge, in addition to the 1,000,000*l.* of Oude and Rohilkund Railway debentures already mentioned, of 920,300*l.* of railway debentures similarly bearing 3½ per cent. interest, while 1,340*l.* of India stock at higher rates was also paid off, as well as 98,736*l.* of stock bearing 3½ per cent. interest; there was, therefore, a net reduction of debt to the amount of 720,376*l.*

## SAVINGS BANKS AND OTHER OBLIGATIONS.

Savings Banks and other Obligations.

The following table shows the amount received and paid on account of savings banks, loans to municipalities, and other obligations in India :—

| | 1891–92. | 1892–93. |
|---|---|---|
| | Rx. | Rx. |
| Savings Banks, &c. (net deposits) | 851,173 | 922,339 |
| Loans to Port Trusts, Municipalities, Native States, &c. (net disbursements) | *—488,787* | *—356,268* |
| Provincial Advances and Loans (net disbursements) | *—465,405* | *—493,340* |
| Other Obligations (net receipts) | 421,728 | 310,175 |
| TOTAL | 318,709 | 382,906 |

## CASH BALANCES.

Cash Balances.

The following statement shows the amount of the cash balances, and the extent to which they were increased or reduced by the transactions of the year :—

| | On 1st April | | | Increase or Decrease. | |
|---|---|---|---|---|---|
| | 1891. | 1892. | 1893. | In 1891–92. | In 1892–93. |
| In India - - Rx. | 17,876,244 | 17,287,005 | 15,271,756 | *—589,239* | *—2,015,249* |
| In England - £. | 3,835,050 | 4,122,626 | 2,268,388 | 287,576 | *—1,854,238* |

## COINAGE AND PAPER CURRENCY.

Coinage and Paper Currency.

The value of the coinage at the Mints of Calcutta and Bombay was :—

| | CALCUTTA. | | BOMBAY. | | TOTAL. | |
|---|---|---|---|---|---|---|
| | 1891–92. | 1892–93. | 1891–92. | 1892–93. | 1891–92. | 1892–93. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Gold - - - | 24,786 | — | 11 | — | 24,797 | — |
| Silver - - - | 1,479,020 | 2,998,018 | 4,074,950 | 9,613,510 | 5,553,970 | 12,611,528 |
| Copper - - - | 166,317 | 131,119 | — | — | 166,317 | 131,119 |
| TOTAL - - - | 1,670,123 | 3,129,137 | 4,074,961 | 9,613,510 | 5,745,084 | 12,742,647 |

The receipts and expenditure of the Indian Mints were as follows :—

| | 1891–92. | 1892–93. |
|---|---|---|
| | Rx. | Rx. |
| Receipts - - - - - - | 210,046 | 310,335 |
| Expenditure - - - - - | 97,109 | 112,007 |
| Net Receipts - - - | 112,937 | 198,328 |

On the 31st of March 1893 the amount of notes in circulation was Rx. 26,401,820, being Rx. 2,325,412 more than on the corresponding date in 1892. The reserve was, in silver coin Rx. 17,538,574, in silver bullion Rx. 868,246, and in Government securities Rx. 8,000,000, while a deduction of Rx. 5,000 must be made for notes in transit from Calcutta to Bombay.

## OPIUM.

Opium. General.

The opium revenue is raised partly by a monopoly of opium in Bengal, and partly by the levy of a duty on all opium exported from Native States. Though the poppy can be grown in most parts of India, its cultivation in British territory is permitted only in parts of Bengal and of the North West Provinces and Oudh. A few thousand acres of opium are grown in the Punjab for local consumption. The cultivator of opium in the monopoly districts receives advances to enable him to prepare the land for the crop, and he is required to deliver the whole of the produce at a fixed price to opium agents, by whom it is despatched to the Government factories at Patna and Ghazipur to be prepared for the China market. The chests of manufactured opium are sold by auction at monthly sales which take place in Calcutta; and in order to prevent speculation and to steady prices, the quantity to be offered at each sale during each year is notified in the previous year. A sufficient reserve is retained to supply the deficiencies of bad seasons; but owing to a succession of four bad opium crops the reserve is now exhausted. A small quantity of opium is used by the Indian excise departments. In 1861 the average price of opium sold by auction for the China market was as high as Rx. 185 per chest of 133 lbs. weight, but since that year it has fallen. In the calendar year 1893 the average price was Rx. 115½; it had been Rx. 116 in 1892, 103¾ in 1891, and 105½ in 1890.

Opium is grown in the Native States of Rajputana and Central India. Some of these States have agreed to assimilate their internal opium arrangements to the British excise system, and to prevent contraband dealings. They levy heavy dues on opium exported from their territories for the China market, and such opium pays to the Indian Treasury a duty which amounted in 1892-93 to Rx. 60 per chest on exportation.

After the close of the year 1892-93 a Royal Commission was appointed to investigate and report upon the Indian opium question.

The yield of the opium revenue for the past four years has been :—

| | 1889–90. | 1890–91. | 1891–92. | 1892–93. |
|---|---|---|---|---|
| Opium Receipts : | Rx. | Rx. | Rx. | Rx. |
| Auction sales of monopoly opium - - | 6,477,079 | 5,914,320 | 5,954,292 | 6,096,227 |
| Duty on Bombay or Malwa opium - - | 1,890,854 | 1,754,088 | 1,844,281 | 1,675,653 |
| Cost of opium issued to the Excise and other Departments. | 215,123 | 210,774 | 213,867 | 221,300 |
| Total - - - Rx. | 8,583,056 | 7,879,182 | 8,012,440 | 7,993,180 |
| Opium expenditure, chiefly in Bengal - - | 1,605,107 | 2,180,797 | 1,861,813 | 1,602,496 |
| Net Opium Revenue - - - Rx. | 6,977,949 | 5,698,385 | 6,150,627 | 6,390,684 |

The number of chests of Bengal opium sold in the two earlier years was 57,000, but it fell to 56,250 in the year 1891–92, and to 48,852 chests in the year 1892–93; the number of chests of Bombay opium paying duty was 28,372 in the year 1889–90, 28,413 in 1890–91, 30,654 in 1891–92, and 27,845 in the year 1892–93. The receipts shown above are outside the provincial opium duties of Rx. 747,792, shown in the excise section of this Statement as the receipts of 1892–93.

The

Opium.

The net revenue from opium for 1892–93, though considerably below what it was in former years, shows an increase on that of 1891–92, which is mainly due to the poor opium crop, whereby the expenditure on payments to opium-growers was diminished in Bengal. The net opium revenue during recent years has been as follows :—

| Net Opium Revenue in | Rx. | Net Opium Revenue in | Rx. |
|---|---|---|---|
| 1872–73 - - - - | 6,870,423 | 1888–89 - - - | 5,964,404 |
| 1875–76 - - - - | 6,250,860 | 1890–91 - - - | 5,698,385 |
| 1878–79 - - - - | 7,700,671 | 1891–92 - - - | 6,150,627 |
| 1880–81 - - - - | 8,451,276 | 1892–93 - - - | 6,390,684 |
| 1883–84 - - - - | 7,701,518 | | |

Bengal.

The area actually cultivated with the poppy in the Ganges Valley, which had been 556,527 acres in 1885, was 463,664 acres in 1891–92, and 454,244 acres in 1892–93. The yield of opium had been very short in 1891–92, and was again poor in 1892–93 ; the total quantity manufactured was 39,701 and 42,890 chests in the two years, as compared with 74,325 chests in 1887–88. In 1892–93 the yield of opium was 12½ lbs. per acre, against 11½ lbs. in the preceding season, and against a normal out-turn of 18 lbs. per acre in a year of good harvests. The opium reserve in Calcutta, which ought to stand at 30,000 chests at the end of every year, is expected to have entirely disappeared by December 1894, notwithstanding that the yearly sales have been reduced by 12,000 chests. It is reported that cultivators of opium have lost heart, after experiencing several bad opium seasons in succession ; that "poppy does not pay as well as it used to do," and that "the previous "unfavourable seasons, coupled with the competition of potato, sugar-cane, "and wheat have had their effect on the cultivators." The number of prosecutions for breaches of the Opium Laws in the year 1892-93 was 618, or the same number as in the preceding year. The percentage of convictions was 87 per cent. as compared with 93 per cent. in the year 1891–92.

The number of chests of duty-paid Malwa opium brought into Bombay from Rajputana and Central India was 26,655, or 13 per cent. less than in the preceding year. The rate of duty was the same as in 1891–92. Of the Malwa supply, 10 chests were exported to African ports, and 57 chests to Cochin and Allepey ; and 25,243 chests were sent to China, or 3,878 less than in 1891–92. The licit consumption of opium in British districts of the Bombay presidency was 127,149 lbs., as compared with 140,638 in the previous year. The issue price of opium from the Government depôts was ten rupees per lb. The quantity of opium taken by Native States from the Bombay Government during the year was 93,364 lbs., as compared with 106,665 lbs. and 102,052 lbs. in the two previous years.

## SALT.

SALT. General.

The salt revenue is raised by a duty on all salt imported into, or manufactured in, India. The rate of duty has in past times ranged from $\frac{1}{4}$th of a rupee (in Burma) to $3\frac{1}{4}$ rupees (in Bengal) per maund of 82 lbs.; during the year 1892–93 the rate was $2\frac{1}{2}$ rupees over the whole of India, except Burma, where it was fixed at one rupee per maund. The Indian sources of salt supply are the coast, where salt is manufactured for the consumption of all southern and western India and part of Burma and Central India; the salt lakes and other sources of Rajputana, which supply the North-Western Provinces, Oudh, and a part of Central India; the salt mines of the Punjab, which supply that province and a varying area southward; importations from beyond the sea, which supply Bengal and the greater part of Burma. The duty is levied on salt at the place of manufacture, or at the port of importation, before it passes into consumption. The regions supplied from each source contract or extend, according to varying circumstances of the season, or of markets, or of means of carriage; for instance, when an unusually wet season limits salt production by solar evaporation on the coast, the inland sources of supply send salt to make up for the deficiency; when a railway was opened to the Punjab mines, salt made its way thence further south and east.

The SALT REVENUES and CHARGES in the year 1892–93 were as follows :—

| PROVINCES. | Price of and Excise on Salt made Locally. | Duty on Imported Salt from England. | Duty on Salt Imported from other Sources. | Miscellaneous. | TOTAL. | Charges. | Net Salt Revenue. |
|---|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Northern India | 1,913,533 | — | — | 16,969 | 1,930,502 | 116,457 | 1,814,045 |
| Burma | 17,251 | 140,648 | — | 920 | 158,819 | 738 | 158,081 |
| Bengal | — | 1,605,635 | 701,031 | 12,822 | 2,319,488 | 6,826 | 2,312,662 |
| Madras | 1,930,358 | 415 | — | 21,010 | 1,951,783 | 169,379 | 1,782,404 |
| Bombay | 2,155,280 | 613 | 739 | 6,144 | 2,162,776 | 135,125 | 2,027,651 |
| TOTAL, 1892–93 | 6,016,422 | 1,747,311 | 701,770 | 57,865 | 8,523,368 | 428,525 | 8,094,843 |
| 1891–92 | 5,751,574 | 1,856,869 | 523,546 | 55,750 | 8,187,739 | 412,462 | 7,775,277 |

The charges above shown do not include a sum of about Rx. 300,000 paid under treaties to Native Chiefs who have assigned the management of their salt sources to the British Government. An increase of Rx. 512,000 in the salt revenue was shown in 1889–90, and now a further increase of Rx. 319,566 is shown for the year 1892–93. This advance of the revenue is due to the increase of consumption, as there has been no enhancement of duty. The alteration in the duty in 1888 temporarily checked consumption, which fell in 1888–89 below the average of the two previous years, but has since 1891–92 been higher than before 1888, thus :—

| In the Year | Total Actual Consumption of Duty-paid Salt in India, inclusive of Burma. | |
|---|---|---|
| 1885–86 | 32,289,000 | Maunds, each maund being equal to 82⅔ lbs. avoirdupois. |
| 1886–87 | 34,330,000 | ,, |
| 1888–89 (The rate of duty was raised in January 1888 from 2 Rs. to 2½ Rs. per maund). | 31,474,000 | ,, |
| 1889–90 | 33,486,000 | ,, |
| 1890–91 | 33,722,000 | ,, |
| 1891–92 | 34,851,000 | ,, |
| 1892–93 | 35,451,000 | ,, |

The

The amount of local salt consumed in Burma is not precisely known, but in the foregoing figures is estimated at 400,000 maunds in 1889–90 and subsequent years, but at 560,000 maunds in each previous year. Salt.

The duty-paid salt probably provides for about 270 million people in British and Native India. At this rate the total consumption (35,451,000 maunds for 270,000,000 people) falls at about $10\frac{3}{4}$ lbs. per head. But the average consumption differs widely in the several provinces, ranging from $18\frac{3}{4}$ lbs. per head in Burma and $16\frac{1}{3}$ lbs. in Madras to $10\frac{1}{4}$ lbs. per head in Bengal and about 8 lbs. per head in the North-Western Provinces and Oudh.

The North India Salt Department controls the salt sources of the Punjab and of Rajputana, whence are supplied the wants of the Punjab, Oudh, the North-Western Provinces, the northern districts of the Central Provinces, and the greater part of the Rajputana and Central India States. The sales of duty-paid and free salt at the northern salt sources amounted to 8,897,000 maunds, or 8 per cent. above the sales of the previous year; the total consumption of 1892–93 was 19 per cent. higher than the average consumption of the three years before the enhancement of the duty in 1888. A large increase of consumption occurred in salt from the Sambhur Lake works and also in Punjab salt; Didwana salt alone showed a decrease, and can no longer compete with Sambhur Salt. Of the total consumption, the Sambhur salt lake supplied 5,109,000 maunds, the Mayo mine in the Punjab supplied 2,083,000 maunds, and the remainder came from minor salt sources. The gross receipts of salt revenue increased from Rx. 1,957,000 to Rx. 2,129,000, and were the highest ever realised; the charges came to 4·8 per cent. on the receipts, as against 6 per cent. in the previous year. A further reduction was effected in the price of Sambhur salt, which since the year 1872, when the Rajputana salt sources were first leased by Government, has fallen from $10\frac{3}{4}$ annas, exclusive of duty, to $2\frac{2}{3}$ annas a maund. The number of prosecutions for breach of the salt law fell from 775 to 541; of this latter number 42 persons were acquitted and only 15 were sentenced to imprisonment. Northern India.

The price of Sambhur salt at the Cawnpore market rose from $3\frac{1}{8}$ to $3\frac{3}{16}$ rupees per maund; Punjab rock salt ruled a trifle cheaper than in the preceding year.

The total quantity of salt on which duty was paid in Bengal during the year was 10,143,000 maunds, or about one per cent. more than in the previous year; the amount imported and manufactured during the year was 9,451,000 maunds, of which there came from, Bengal.

| | Maunds. | | Maunds. |
|---|---|---|---|
| The United Kingdom | 5,941,000 | Red Sea and Persian Gulf Ports | 887,000 |
| Germany | 938,000 | Aden | 1,000,000 |
| Bombay | 544,000 | Orissa Coast Factories | 67,000 |
| Madras | 74,000 | | |

The gross salt revenue was Rx. 2,431,000, or 1 per cent. above the receipts of the preceding year, against an expenditure of Rx. 44,800. The consumption of licit salt in the seven saliferous districts outside Orissa decreased by 5 per cent. In Orissa the consumption of locally-manufactured salt, and also of salt from Calcutta showed an increase over the previous year; but imports from Ganjam fell off largely; and the total consumption of Orissa was nearly 2 per cent. less than in the year 1891–92. The number of prosecutions for offences under the salt laws rose from 1,366 in the previous year to 1,472, of which 682 occurred in Orissa, and in 118 cases the accused persons were acquitted. The stocks of salt were unusually low at the end of the year; prices ranged from $3\frac{1}{4}$ rupees per maund in Calcutta at the cheapest season, to $4\frac{3}{4}$ rupees per maund in Lohardugga at the dearest season; in Orissa the price ranged from $3\frac{3}{8}$ to $3\frac{7}{8}$ rupees per maund. The average consumption of salt in Bengal, according to the census figures of 1891, was $10\frac{1}{4}$lbs. per head; it was the same in the saliferous as in the non-saliferous tracts, save in Orissa, where it was $9\frac{7}{8}$lbs per head.

SALT. Madras.

It was explained in a previous statement that in Madras, where salt is made on the coast by solar evaporation, a limited number of Government salt factories had been re-opened in order to remedy the evils of high prices and small stocks, which had resulted from the handing over of the manufacture of salt to capitalists under an excise system. The intention is to create as soon as possible a reserve of Government salt, but not to disturb the market by selling Government stocks unless the supply should run short or prices be forced up at any salt mart; the Government reserve stocks are eventually to be somewhat more than one-third of a year's consumption. During the year 1892-93 there were 60 factories at work, of which 17 were Government establishments. The reserve of Government salt was brought up to 3,105,000 maunds. The average price of bonded salt throughout the presidency, which had been $6\frac{1}{12}$ annas per maund under the excise system in 1887–88, was further reduced to $3\frac{1}{2}$ annas per maund in 1892–93; and the highest maximum in any district was 9 annas at Negapatam for a short time while stocks were low. The total quantity of salt manufactured during the year was 9,244,000 maunds against 9,733,000 in the preceding year, and an average of 5,260,000 maunds in the two years 1885–87, when the output of salt was too low. The salt stocks at the end of the year were equal to 23 months' supply, as compared with the 20 months' supply at the end of the previous year, and five months' supply at the end of 1886–87. The reason for maintaining such large stocks is that an unfavourable season may in any year reduce the output of existing factories by 50 per cent.

The issues of Madras salt for home and inland consumption were 8,157,000 maunds, or 0·34 per cent. below the issues of the preceding year. The decrease was attributed to the decreased demand for Ganjam salt in Orissa. It continues to be clear that the enhancement of the salt duty from Rs. 2 to Rs. $2\frac{1}{2}$ a maund in January 1888 has had no permanent effect on the consumpton of salt in the Madras Presidency. The average yearly issues of Madras salt for home and inland consumption have been :—

| Period. | Rate of Duty per Maund. | Average Yearly issues for Consumption. | |
|---|---|---|---|
| | Rs. a. p. | Maunds. | |
| 1861–65 | 1 5 – | 6,372,000 | |
| 1866–68 | 1 8 – | 6,728,000 | |
| 1869–75 | 1 13 – | 6,509,000 | |
| 1878–81 | 2 8 – | 6,178,000 | |
| 1882–87 | 2 – – | 7,459,000 | Exclusive of salt issued at low rates for fish curing. |
| 1888–89 | 2 8 – | 7,724,000 | |
| 1890–91 | 2 8 – | 7,923,000 | |
| 1892–93 | 2 8 – | 8,157,000 | |

The consumption of local salt is thus now 32 per cent. higher than it was in the previous era of the same rate of duty, namely, from 1878 to 1881. The consumption of salt by 34,288,000 of the population of South India, including Mysore, Coorg, and certain Native State, came to $15\frac{1}{2}$lbs. per head; the consumption by the population of the Madras Presidency only, exclusive of four coast districts, came to $16\frac{1}{3}$ lbs. per head. These ratios are reckoned on the increased population shown by the census of 1891.

The gross revenue from Madras salt was Rx. 1,930,000, or $3\frac{1}{3}$ per cent. below the receipts of the preceding year. The decrease was due mainly to the reduced demand for Orissa, and partly to an increase in credit sales of salt. Prosecutions under the salt laws, though slightly fewer than in the previous year, were still numerous; 18,719 persons were charged with salt offences, of whom 4,453 were released by departmental officers with a warning, and 13,947 were sent for trial. Of the persons tried during the year by magistrates nearly 99 per cent. were convicted. The average fine imposed on offenders against the salt laws was $1\frac{1}{4}$ rupees.

During the year 140 bonded yards in the Madras Presidency were open for curing fish under special regulations, whereby cheap salt is sold to fish curers. The quantity of fish brought to be cured was 45,036 tons, or 5 per cent. less than in the previous year; 5,899 tons of salt were sold for curing fish

fish in bond; and the average quantity of salt used was 2 cwts. 69 lbs. to every ton of fish. The cost of the yards to the treasury was more than covered by the price realised for salt. Nearly all the salt fish is consumed within the presidency, the exports being returned at 3,770 tons, valued at 1½ annas (about 1½ pence) per pound. SALT.

On the Bombay coast salt is made partly by boiling, and partly by solar evaporation, at 384 factories; no new factories or salt works were opened during the year 1892–93; but 62 salt works were closed at Sanikatta on the North Kanara coast. Owing to the termination of the Portuguese treaty, British salt from the Bombay coast is now able to compete with Goa salt in the Malabar and Mysore markets on more favourable terms. The amount of salt manufactured was 9,156,000 maunds, or 1,604,000 maunds less than in the previous year; the quantity of salt written off as wastage was 8½ per cent., being about the same as in the previous year. The total removals of salt for consumption came to 8,715,000 maunds. The amount of duty-paid salt issued for consumption in the Bombay Presidency was 3,228,000 maunds, or 11·11 lbs. per head of the population, as compared with 11·82 lbs. in the previous year. It is said that consumption has not really decreased; issues from Government stocks fell off because local markets had been glutted with salt at the end of the previous year. In Guzerat the rate was 8·05 lbs. per head, and in the rest of the presidency it was 12·84 lbs.; yet Guzerat is the richest part of the province. The gross salt revenue receipts were Rx. 2,180,000, or Rx. 83,000 below the total of the previous year, and Rx. 78,000 above the corresponding figure for 1890–91. During the year, the average price of salt, exclusive of duty, ranged from 1 anna 11 pie per maund at the Konkan works to 3¾ annas per maund at the Shiroda works; the wholesale price of duty-paid salt ranged from Rs. 3 per maund in the cheapest district, Kolaba, during April to Rs. 4$\frac{1}{16}$ per maund in Kanara, the dearest district, during December. In Bombay only five fish-curing yards were at work; the quantity of fish brought to be cured in bond was 1,001 tons, and 318 maunds of cheap salt were issued to fish curers. The number of persons tried for offences under the salt laws was 872, against 724 in the previous year; the number convicted was 773, against 639. Bombay.

In Sind the amount of duty-paid salt passed into consumption rose from 244,000 maunds to 249,000 maunds, and the salt revenue was Rx. 70,300, or Rx. 2,370 above the receipts of the previous year. The consumption of duty-paid salt came to 7·4 lbs. per head of the population against 7·27 lbs. in the previous year. The number of prosecutions for salt offences rose from 213 to 232; the quantity of illicit salt seized was only 7¼ maunds. The average retail price of salt remained stationary at Rs. 3. 6a. 5p. per maund. Sind.

The amount of salt imported into Burma in 1892–93 was 1,422,000 maunds, against 1,359,000, 1,406,000 and 1,190,000 maunds in the three previous years. The revenue on salt manufactured locally was Rx. 17,673, as compared with Rx. 16,611 in the year 1891–92, representing a production of perhaps 400,000 maunds in each year. The total salt revenue of Burma was Rx. 162,200, against Rx. 161,000 in the preceding; and the total consumption was approximately 1,822,000 maunds during the year, equal to about 18¾ per head for 8 million people in Burma and the Shan States. Burma.

## EXCISE.

The excise revenue of India is raised by duties upon, and by fees for, licenses to sell liquors and intoxicating drugs. Tobacco, which is grown in almost every village, and is consumed by nearly all men and by many women in the empire, is not subjected to any duty; tea and coffee, which are grown largely for Indian consumption and for exportation, are also free from all duties. Excise duties are raised, under legislative enactments, partly by the periodic sale of monopolies in specified excisable articles over defined areas; partly by a stillhead duty on all spirits manufactured at distilleries; partly by the issue of licenses for the working of stills at specified places; and partly by fees on licenses to sell different kinds of liquors. The duties on intoxicating drugs, and on fermented liquors other than beer brewed after the European fashion, are raised mainly by yearly sales of monopoly licenses. A customs duty is also levied on all imported spirits, wines, EXCISE. General.

EXCISE.

wines and beer. The import duty is six rupees per gallon on London proof spirit; 2½ rupees per gallon on sparkling wines; one rupee per gallon on other wines; and one anna per gallon on beer. Over almost the whole of Bombay and the Punjab; over the populous parts of Madras, the North Western Provinces, Oudh, and Burma, and over some parts of Bengal and the Central Provinces, a still-head duty is levied on all Indian spirit according to its alcoholic strength. The still-head duty ranges as high as five rupees per gallon of London proof spirit; if the cost of licenses be added, the total duties are in places more than seven rupees per gallon of spirits. The system of excise management followed in these tracts is called the central distillery system. Over a large, but decreasing part of Bengal, and over most of the Central Provinces, over the whole of Assam and Berar, and over limited tracts in other provinces, revenue is levied on Indian spirits by leasing the spirit monopoly to the highest bidder, which is called the farming system; or by licensing the establishment of private stills, which is called the out-still system. The central distillery system is admittedly the best for preventing the spread and consumption of cheap liquor; and the Government of India have decided to extend that system, and to restrict the farming and out-still systems as narrowly as possible. The difficulty is that in sparsely-peopled forest tracts the materials for illicit distillation are everywhere available; the tribes addicted to drinking often live in these regions; an adequate and trustworthy preventive staff cannot be kept in such places; and illicit practices prevail, to the consequent demoralisation of the people, if weak liquor cannot be obtained in some lawful way. Licensed out-stills are sometimes the only means of meeting the requirements of such exceptional tracts.

The following table gives the excise revenue of 1892-93 for each province under the different heads, as shown in the financial accounts:—

| —— | India, General. | Bengal. | North West Provinces and Oudh. | Punjab. | Burma. | Central Provinces. | Assam. | Madras. | Bombay. | TOTAL. |
|---|---|---|---|---|---|---|---|---|---|---|
| License and Distillery Fees, and Duties for the Sale of Spirits, Fermented Liquors and Drugs, viz:— | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| License Fees and Farmers' Rent. | 6,310 | 605,576 | 134,833 | 57,348 | 182,266 | 43,064 | 32,218 | 630,776 | 58,389 | 1,757,780 |
| Distillery Fees - - - | 22,400 | 6,065 | 87 | 354 | 5,569 | 112,733 | – | 130 | 37,723 | 184,601 |
| Still-head Duty - - - | 64,952 | 194,333 | 253,173 | 59,665 | 62,729 | 16,114 | 1,778 | 286,400 | 665,772 | 1,605,016 |
| License Fees for sale of Opium and its preparations. | 3,336 | 51,063 | 17,450 | 34,326 | 61,337 | 28,533 | 28,080 | 33,454 | 9,305 | 266,884 |
| License Fees for sale of other drugs. | 3,758 | 19,534 | 73,892 | 17,059 | – | 13,776 | 16,925 | 4,531 | 2,918 | 152,293 |
| Rent of Toddy Trees - - - | 1,075 | 309 | 7,680 | – | 21 | 2,782 | – | 211,681 | 113,814 | 337,362 |
| Total - - - | 101,831 | 876,880 | 487,115 | 168,752 | 474,737 | 216,542 | 86,001 | 1,166,972 | 887,821 | 4,303,936 |
| Duty on Opium consumed in India. | 2,189 | 160,942 | 62,086 | 89,038 | 162,603 | 44,458 | 158,710 | 40,307 | 107,459 | 747,792 |
| Acreage on Land cultivated with the Poppy. | – | – | – | 4,234 | – | – | – | – | – | 4,234 |
| Fines, Confiscations, Miscellaneous. | 619 | 1,053 | 676 | 260 | 112 | 2,098 | 63 | 3,867 | 8,023 | 16,771 |
| Duty on Ganja - - - - | 268 | 120,583 | – | – | – | 12,510 | 13,956 | – | 22,393 | 169,710 |
| TOTAL Revenue - - - | 104,907 | 1,159,458 | 549,877 | 182,284 | 474,737 | 275,608 | 258,730 | 1,211,146 | 1,025,696 | 5,242,443 |
| Charges - - - - | 3,873 | 65,666 | 15,783 | 5,095 | 6,076 | 4,231 | 1,271 | 57,414 | 33,604 | 193,013 |
| Net Revenue, 1892-93 - | 101,034 | 1,093,297 | 534,094 | 177,189 | 468,661 | 271,377 | 257,459 | 1,153,732 | 992,092 | 5,049,432 |
| Net Revenue, 1891-92 - | 91,778 | 1,046,831 | 510,103 | 178,840 | 419,667 | 272,146 | 259,529 | 1.157,884 | 990,465 | 4,927,243 |

To this total must be added the sum of Rx. 610,253, yielded by import duties on liquors and spirits imported into India during the year 1892–93, whereby the whole drink and drugs revenue of India is raised to somewhat more than four annas a head on the whole population of British India.

There

There has been considerable increase in the excise revenue during the past 30 years; but this increase, though in part due to enhanced consumption of liquors caused by the growth of population and the general increase of earnings, is yet largely, and in some localities mainly, the result of improved excise administration, which has doubled or trebled the rates of liquor duty, and has, at the same time, restricted the use of illicit intoxicants. The totals of the excise and customs revenues on liquors and drugs consumed in India during the past 20 years compare thus :— Excise.

| | Rx. | | Rx. |
|---|---|---|---|
| 1874–75 - - - | 2,633,369 | 1889–90 - - - | 5,294,420 |
| 1880–81 - - - | 3,515,062 | 1890–91 - - - | 5,373,699 |
| 1883–84 - - - | 4,259,099 | 1891–92 - - - | 5,516,827 |
| 1886–87 - - - | 4,864,764 | 1892–93 - - - | 5,659,685 |

For the 221¼ millions of people who inhabit the several provinces of British India and Berar, the total number of shops licensed for the retail sale of spirits, fermented liquors, opium and drugs, is as follows, province by province :—

| PROVINCE. | Number of Retail Shops licensed in 1892–93 for the Sale of | | | | | |
|---|---|---|---|---|---|---|
| | Spirits made in India. | Imported Spirits or Liquors. | Toddy and Rice Beer or other Indian Fermented Drinks. | Opium and its Compounds. | Narcotic or Intoxicating Drugs, other than Opium. | Quantity of Opium sold for Local Consumption so far as known. |
| | | | | | | *Maunds, 82 lbs. each.* |
| Bengal - - - - - | 3,006 | 535 | 17,346 | 1,998 | 2,672 | 1,934 |
| North West Provinces and Oudh. | 6,819 | 207 | 4,411 | 1,040 | 3,872 | 1,703 |
| Punjab - - - - - | 1,271 | 438 | 38 | 1,780 | 1,621 | 1,523 |
| Burma - - - - - | 50 | * 431 | 932 | 34 | None. | 1,736 |
| Central Provinces - - - | 6,792 | 46 | 751 | 1,133 | 1,047 | 633 |
| Assam - - - - - | 192 | 120 | 14 | 866 | 272 | 1,333 |
| Madras - - - - - | 11,974 | 693 | 18,755 | 1,030 | 246 | 889 |
| Bombay - - - - | 2,863 | 412 | 1,793 | 1,162 | 1,253 | 1,550 |
| Berar - - - - - | 1,122 | 19 | 973 | 478 | 484 | 437 |
| TOTAL - - - | 34,089 | 2,901 | 45,013 | 9,521 | 11,467 | 11,738 |

* In Burma the same shops are often licensed so sell foreign and central distillery liquor.

In Bengal the total excise revenues of 1892–93 and the two previous years were as follows :— Bengal.

| Receipts from | 1890–91. | 1891–92. | 1892–93. |
|---|---|---|---|
| | *Rx.* | *Rx.* | *Rx.* |
| Country spirits - - - - - - | 452,826 | 481,464 | 502,342 |
| Foreign liquors and rum - - - - | 32,948 | 45,379 | 62,700 |
| Fermented local liquors, toddy and rice-beer - | 111,787 | 126,151 | 128,425 |
| Opium and its compounds - - - - | 211,964 | 224,050 | 219,581 |
| Ganja, bhang, and their compounds - - | 235,941 | 235,056 | 245,070 |
| Miscellaneous - - - - - - | 622 | 881 | 1,148 |
| TOTAL - - - | 1,046 088 | 1,112,981 | 1,159,266 |
| Add duties on imported liquors - - - | 161,311 | 160,360 | 167,693 |
| GRAND TOTAL - - - | 1,207,399 | 1,273,341 | 1,326,959 |

Excise. Bengal.

The policy of substituting the central distillery system for the out-still system of raising revenue from country spirits was not carried further in Bengal during the year. Out-stills had been abolished in 1890 over all districts of the Burdwan, Presidency, Dacca and Orissa divisions, containing a population of 30 millions. The number of central distilleries remained at 34, as in the previous year. The maximum number of licensed out-stills in the whole province was 1,931, as compared with 1,770 in the previous year, and 5,250 out-stills in the year 1881-82. In districts where out-stills are retained, special steps are taken to check and restrict the out-turn of spirit, and to keep the retail price at a higher rate than heretofore. The total number of retail licenses for the sale of country spirits, rum and imported liquors, during the past three years, has been :—

| | 1890-91. | 1891-92. | 1892-93. |
|---|---|---|---|
| Number of licenses granted for the retail sale of— | | | |
| Country spirits from out-stills - - | 1,719 | 1,770 | 1,931 |
| Country spirits from central distilleries - | 1,303 | 1,149 | 1,175 |
| Rum, imported wines, spirits and other liquors. | 613 | 582 | 535 |
| | 3,635 | 3,501 | 3,641 |

Before a new license of the kind is issued for any locality, every care is taken to ascertain the opinion of the residents. No trustworthy estimate can be offered of the quantity of spirit passing into consumption from out-stills ; but much of the out-still liquor consumed in Behar is said to be nearly 90° below London proof and vendors are encouraged to deal in weak liquor. The out-turn from central distilleries in the year was 398,478 gallons L.P. against 399,384 gallons in the previous year. The still-head duty levied on central distillery liquor ranges from $1\frac{1}{8}$ to 5 rupees per gallon of proof spirit. Including still-head duty, license fees and other taxation, the total revenue on distillery liquor came to Rx. 240,306, or 6·03 rupees per gallon of London proof spirit. The revenue on country spirits raised from out-stills was Rx. 262,035, against Rx. 245,014 in the preceding year. The total revenue from country spirits, Rx. 502,341, was larger than that of any of the three preceding years, but was less than that of 1888–89 by nearly Rx. 7,000. The increase during the year was greater in the tracts supplied by out-stills than in the central distillery area.

The revenue from toddy was Rx. 94,970, as compared with Rx. 95,740 in the previous year, though the number of licensed shops was 15,675 against 16,920 in 1891–92, and 30,268 in the year 1881–82. The number of pach-wai, or rice-beer shops, was 1,671; the number of licensed ganja shops was 2,672, as compared with 2,578 in the preceding year, and the amount of licit ganja consumed was 5,451 maunds, against 5,677, and 6,095 in the two preceding years. The number of shops licensed for the retail sale of opium was 1,714, or 16 more than in the preceding year : the amount of licit opium consumed fell from 2,005 to 1,934 maunds. The number of shops licensed for selling opium, prepared after the Chinese fashion, known as chandu, was 71, against 72 in the previous year ; and the licenses for selling madak, or opium prepared after the Bengalee manner, was reduced from 302 to 263. Smoking on licensed premises was forbidden.

The number of arrests for excise offences fell to 4,634, a decrease of $6\frac{1}{2}$ per cent., and convictions were obtained against 3,934 persons ; of whom 282 persons were convicted of the offence of illicit distillation.

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Excise. North-Western Provinces and Oudh.

The latest excise report for the North-Western Provinces and Oudh relates to the year ending in September 1892. For the last three years the excise revenues have been :—

| Receipts from | 1889–90. | 1890–91. | 1891–92. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| Country spirits | 334,300 | 307,965 | 322,193 |
| Foreign liquors and rum | 42,900 | 45,822 | 45,313 |
| Opium | 78,900 | 77,328 | 78,050 |
| Other drugs | 73,100 | 69,221 | 71,209 |
| Toddy and miscellaneous | 11,800 | 10,156 | 8,819 |
| TOTAL | 541,000 | 510,492 | 525,584 |

Though there was an increase of Rx. 15,092 over the revenue of the preceding year, still the total excise revenue was lower by Rx. 45,000 than it was in 1888–89. The falling off had been entirely under the revenue from country spirits, which, however, showed some recovery in the year under report.

The revenue from country spirits was raised as follows :—

(*a*) Rx. 284,100 under the central distillery system, which extends over districts inhabited by 37¾ millions of people.

(*b*) Rx. 24,500 under the out-still system, which extends over tracts containing 6 millions of people.

(*c*) Rx. 13,500 under the farming system, which extends over tracts containing 3⅛ millions of people.

These areas show some small change from the corresponding figures for the previous year. The total amount of spirit passed out of all central distilleries was 1,368,623 gallons, against 1,443,963 gallons in the previous year, and against 2,056,314 gallons in the year 1885–86. None of the liquor issued during the year was stronger than 25° below proof, and 13 per cent. of it was weaker than 50° below proof. The number of distilleries was 45, against 51 in the previous year. The number of licensed retail shops for country spirits in the two provinces further fell from 5,427 to 5,315 in the central distillery tracts ; and rose from 1,464 to 1,504 in the tracts where the out-still and farming systems prevailed ; while the retail licenses for rum and foreign spirits rose from 201 to 207 ; the consumption of rum from the Rosa factory rose from 21,034 gallons to 31,962 gallons.

The number of shops licensed for the sale of opium and its compounds was 1,016, as compared with 1,166 in the previous year. The allocation of opium licenses in the several districts is being considered. The chandu and madak shops, licensed for selling opium prepared for smoking, were reduced from 54 in the year 1888-89 to 26 in the year under report. The quantity of licit opium passed into consumption was 1,703 maunds, against 1,649 maunds in the previous year. The increase is attributed to the repression of illicit opium ; and the quantity is identical with that consumed in 1889–90. The number of shops licensed for the sale of other narcotic drugs was 3,872, as compared with 3,903 in the previous year. The number of licensed toddy shops increased from 4,396 to 4,411, of which 3,067 are situated in the Benares and Gorakpur division, and only 901 in the other 7 divisions.

Prosecutions under the Excise Act increased 26 per cent., and those under the Opium Laws decreased slightly in comparison with the previous year ; the prosecutions for illicit distillation were 252 against 98 in the preceding year. The proportion of convictions to prosecutions was 80 per cent., as in 1891–2.

EXCISE. Punjab.

The excise revenues of the Punjab in the last three years were raised as follows :—

| Receipts from | 1890-91. | 1891-92. | 1892-93. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| Country spirits | 93,579 | 97,094 | 99,027 |
| Imported liquors and rum | 27,779 | 30,600 | 32,435 |
| Opium | 45,948 | 46,177 | 47,773 |
| Other drugs and miscellaneous | 17,321 | 19,060 | 15,909 |
| TOTAL | 184,627 | 192,931 | 195,144 |

The increase of 1½ per cent. in the revenue was small, as compared with 8 per cent. in the previous year. It is explained that the prevalence of epidemic fever during three months of the year tended to restrict the consumption of spirits and to promote the use of opium.

The central distillery system is in force throughout the whole province, save in small parts of the Gurgaon and Kangra districts, and there were during the year 29 central distilleries. The rates of still-head duty are four rupees per gallon of proof spirit, three rupees per gallon of spirit less than 25° below proof; 2½ rupees for spirit from 50° to 25° below proof, and two rupees for spirit more than 50° below proof. Country spirits in the Punjab are distilled from molasses. The total consumption of licit spirits and the number of licensed shops for the past two years are returned thus :—

| Consumption, &c. | 1890-91. | 1891-92. | 1892-93. |
|---|---|---|---|
| Country spirits computed at London proof, in gallons. | 180,662 | 188,292 | 192,279 |
| Rum, London proof, in gallons | 34,435 | 39,337 | 37,664 |
| Other imported spirits, in gallons | 84,279 | 85,481 | 79,234 |
| Licensed retail shops for country spirits | 1,461 | 1,289 | 1,271 |
| Licensed retail shops for rum and imported liquors. | 475 | 451 | 438 |

The opium revenue comprised Rx. 2,821 from an acreage fee on lands growing the poppy, and Rx. 35,915 from licenses for the vend of opium, besides Rx. 5,838, the duty on imported opium. The area licensed for poppy cultivation has shrunk from 15,254 acres in the year 1888–89 to 12,643 acres in 1891–92, and 9,857 acres in the year under report. The number of licensed opium shops was 1,780, as compared with 1,785 in the previous year, and 1,910 in the year 1889-90; the quantity of licit opium returned as consumed was 1,523 maunds, as compared with 1,566 maunds in 1891–92, and the total visible supply received into the province during the year was 1,705 maunds, against 2,921 maunds in the previous year. Licenses for shops where opium preparations could be consumed on the premises, *chandu* shops, or "opium dens," as they have been called, were all withdrawn years ago. It is reported that few people, and those mostly immigrants from outside the province, now indulge in smoking opium in private. The number of shops licensed to sell hemp and other drugs was 1,621, against 1,697 in the previous year.

It is reported that, in consequence of the stringent measures taken during the past four years, illicit distillation has much abated. The excise system of Native States has improved, and generally the Chiefs have closed all liquor shops within three miles of the British border. Some smuggling from Native States, however, still goes on. Prosecutions under the liquor laws

laws fell from 368 to 335, and under the opium laws from 917 to 482, as compared with the previous year. The decrease was chiefly under the head of trivial offences by opium cultivators. Excise.

In Burma the excise revenue during the past three years was raised thus :— Burma.

| Receipts from | 1890–91. | 1891–92. | 1892–93. |
|---|---|---|---|
| Lower Burma : | Rx. | Rx. | Rx. |
| Distillery and imported liquors | 89,068 | 104,150 | 116,992 |
| Out-stills | 8,362 | 6,600 | 6,905 |
| Toddy | 26,508 | 27,997 | 30,045 |
| Other fermented liquors | 41,727 | 53,810 | 49,287 |
| Opium | 197,420 | 191,162 | 214,202 |
| TOTAL | 363,085 | 383,719 | 417,431 |
| Add duty on imported liquors | 91,227 | 86,784 | 103,283 |
| Upper Burma excise | 42,010 | 51,264 | 58,463 |
| GRAND TOTAL | 496,322 | 521,767 | 579,177 |

Two central distilleries only were working during the year; they produced 22,358 gallons of spirits, as compared with 47,292 gallons produced by three distilleries in the preceding year. The Rangoon distillery was closed, as its liquor could not compete with the spirit imported from Madras and from abroad. The importations of foreign and Madras spirits increased considerably. At the end of the year the duty was raised from five rupees to six rupees a gallon on local distillery and Madras liquor at London proof. The number of out-stills in Lower Burma was 36, against 37 in the previous year; and in Upper Burma 12 against 14. Three central distilleries were at work in the upper province, and produced 33,057 gallons of spirits, against 19,629 gallons in the previous year.

The number of retail shops licensed under the excise and opium laws in the two sections of the province during the last two years was :—

| | Lower Burma. | | Upper Burma. | |
|---|---|---|---|---|
| | 1891–92. | 1892–93. | 1891–92. | 1892–93. |
| Out-still shops | 37 | 36 | 12 | 14 |
| Distillery spirit and foreign liquor shops | 293 | 291 | 139 | 143 |
| Toddy shops | 898 | 858 | 71 | 74 |
| Rice beer and other fermented liquor shops. | 204 | 205 | — | — |
| Opium shops | 20 | 20 | 12 | 14 |
| Licit opium consumed in maunds | 1,326 | 1,603 | 128 | 133 |

The large increase in the sales of opium were accompanied by a considerable fall in the sums paid for opium licenses. After the close of the year the sale of opium to, and possession of opium by, Burmans and Karens were prohibited; and the issue of opium to licensed vendors, in both Lower and Upper Burma, is restricted to the quantities likely to be consumed

Excise.

consumed by the classes still permitted to use opium. Special vigilance is to be exercised against the smuggling of opium from outside. It is reported that "according to the general opinion of district officers the taste for opium and liquor is not spreading among the Burmese of the upper province." No attempt has been made to stop the cultivation of opium in the Kachin and Chin highlands, where it is largely consumed by the local tribes; the people have been warned against smuggling the drug into Burma. The manufacture and sale of fermented liquor is free among these and kindred hill races.

Prosecutions under the excise and opium laws fell from 3,346 to 3,178; and 2,440 persons were convicted. In the Arakan divisions most of the convictions were for illicit dealings in opium, and several gangs of smugglers were put down. The number of illicit stills detected in the Irrawaddy division fell from 57 to 32 during the year. In Upper Burma, 749 offences against the excise laws, of which 375 were opium cases. The number of illicit stills suppressed was 43, as compared with 70 in the previous year.

Central Provinces.

In the Central Provinces the excise receipts of the past three years have been as follows :—

| Receipts from | 1890 91. | 1891-92. | 1892-93. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| Country spirits | 164,519 | 173,447 | 175,525 |
| Opium | 93,016 | 97,967 | 96,137 |
| Ganja | 21,996 | 23,669 | 26,335 |
| Toddy | 1,989 | 1,882 | 2,882 |
| Miscellaneous | 6,743 | 2,832 | 2,733 |
| Total | 288,263 | 298,507 | 302,394 |

The greater part of the country is supplied with spirits from out-stills, of which there were licensed 1,959 at the close of the year; besides 15 central distilleries and five contract stills. The only change on the previous year's figures was that 32 out-stills were closed; the area supplied by central distilleries and by out-stills have been respectively increased and reduced by 1,521 square miles. At contract stills a fixed daily fee is levied on each still actually in use, and care is taken that no still is used on any day for which the prescribed fee has not been paid. At out-stills the restrictions on manufacture of spirit are the limitation of the number of shops to be supplied, and the limitation of the number and size of the vessels used for distillation. Most of the spirit consumed is about 60° below proof. The duty ranges from 12 annas on liquor 45° below proof, to 3 rupees a gallon on proof spirit.

The receipts on account of country spirits, so far as they can be distinguished, were in round numbers as follows :—

| | Rx. |
|---|---|
| From central distilleries | 53,000 |
| „ contract stills | 4,000 |
| „ out-stills | 117,000 |

The number of licensed retail liquor shops had been reduced in the previous year to 6,882, and 90 more shops were closed during the year, whereby the total was reduced to 6,792; after the end of the year a further considerable number of shops were closed. No trustworthy information exists regarding the quantity or strength of the liquor made at out-stills, so no estimate of the total liquor consumption can be offered; at most of the shops in the interior the liquor is usually of very low alcoholic strength. The material from which liquor is distilled is everywhere the flower of the mhowa tree. The number of licenses for the retail of imported liquors was 46, against 48 in the previous year.

The

Excise.

The number of shops licensed for the sale of opium and its compounds was reduced during the year from 1,161 to 1,133 ; and the quantity of Government opium sold to the licensed vendors fell from 639 maunds to 633 maunds. The orders prohibiting the consumption of opium or drugs on the premises of licensed shops are strictly enforced, and are expected to be beneficial. The amount of opium supplied on payment to feudatory chiefs and zemindars, decreased from 171 maunds to 155 maunds. The number of shops licensed for the retail sale of ganja and its compounds was 1,047, or seven less than in the preceding year ; the quantity of ganja passing into consumption rose from 1,156 to 1,194 maunds ; while the quantity sold to feudatory chiefs increased from 241 to 273 maunds.

There was a decrease of 54 in the number of prosecutions under the excise laws, and an increase of six in cases under the opium laws. Out of 408 cases under the Opium Act, 270 were for the possession of smuggled opium ; but the number of cases in which more than 20 lbs. of smuggled opium was found was only two in all. Out of 547 prosecutions under the Excise Act, 54 were for the illicit distillation of spirits, and 236 for illegal possession of spirits.

Assam.

The excise demand of Assam for the year 1892–93 and previous years was distributed thus :—

| Receipts from | 1890–91. | 1891–92. | 1892–93. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| Country spirits | 34,298 | 35,126 | 38,499 |
| Imported liquors and rum | 3,391 | 3,598 | 3,524 |
| Opium and its compounds | 180,273 | 190,205 | 187,521 |
| Ganja and its compounds | 27,244 | 28,671 | 30,712 |
| Miscellaneous, including Toddy, &c. | 302 | 863 | 600 |
| Total | 245,508 | 259,163 | 260,863 |

The whole revenue of the year was collected with the exception of a small arrear of Rx. 15 in two districts. The revenue from country spirits is raised entirely under the out-still system ; the sites of shops are fixed ; the right to have one still, and to sell spirits at each shop, is sold annually by auction. The number of licensed retail shops for country spirits was 192, against 194 in the previous year. Much of the liquor is weak ; it sells at from six annas to one rupee per quart bottle. The number of retail shops licensed to sell rum was 31 against 38 in 1891–92 ; this rum is sold at from one to two rupees per quart bottle. The quantity of rum distilled in the provinces rose from 7,457 gallons to 10,402 gallons ; while the imported rum fell from 10,796 to 3,447 gallons ; there was a net decrease of 4,404, or 23 per cent. in the consumption of the year. The number of shops licensed for the sale of foreign liquors, including licenses on board steamers, was 89, or 11 less than in the previous year. The total consumption of foreign spirits in Assam was 15,456 gallons, showing an increase of 20 per cent. compared with the previous year. For toddy three licenses, and for rice-beer 11 licenses were issued. The number of licensed ganja shops was 272, or 10 less than in the previous year ; and the quantity of ganja disposed of during the year was 687 maunds, against 791 in the year 1891–92 ; ganja is consumed chiefly in the two districts of the Surma valley. Opium continues to yield three-quarters of the total excise revenue of Assam. The number of licensed opium shops has been gradually reduced from 1,283 in the year 1883–84 to 953 in the year 1891–92, and to 866 in the year 1892–93 ; while the quantity of licit opium consumed was 1,333 maunds, against 1,369 maunds in the preceding year, and 1,494 in the year 1889–90. The number of shops licensed for the sale of madak and chandu, preparations of opium, was reduced from 24 to 16 during the year.

Excise.

The number of prosecutions under the excise and opium laws rose from 456 to 754, and convictions were obtained against 84 per cent. of the accused persons. Nine cases of unlawful cultivation of the poppy and 47 cases of unlawful cultivation of ganja came to light; 61 cases of illicit manufacture and sale of spirits were prosecuted. Most of the other cases were of trifling character; and the only four cases of opium smuggling were reported during the year.

Madras.

The excise revenue of Madras during the last three years was raised thus:—

| Receipts from | 1890-91. | 1891-92. | 1892-93. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| Country spirits | 571,921 | 545,023 | 524,829 |
| Toddy and spirits combined | 7,167 | 4,869 | 2 |
| Toddy alone | 517,637 | 549,668 | 576,616 |
| Foreign liquor and miscellaneous | 38,031 | 36,643 | 40,600 |
| Opium and other drugs | 72,353 | 68,679 | 69,695 |
| Total Rx. | 1,207,109 | 1,204,882 | 1,201,742 |
| *Add*,— Customs Duties on imported liquors | 95,703 | 102,474 | 102,302 |
| Grand Total Rx. | 1,302,812 | 1,307.356 | 1,304,044 |

Duties on country spirits are raised under the central distillery system over the whole presidency, except in Malabar, Ganjam, Godavery, Vizagapatam, and parts of two other districts. In these exceptional tracts, which contain a population of five millions, or one-seventh of the presidency, the farming system obtains. Shop licenses are sold by auction in all the towns, and in most of the rural circles. Over a gradually increasing area a tree tax is imposed on all palm trees tapped for toddy, while the shops for retail sale of toddy are sold by auction to the highest bidder. The rates of stillhead duty range from $4\frac{3}{4}$ rupees a gallon on proof spirit to $\frac{3}{4}$ of a rupee per gallon on spirits 60° under proof; while the total taxation, including license fees, ranges from $2\frac{1}{3}$ rupees to $7\frac{1}{3}$ rupees per gallon of proof spirit in the several districts. In the districts where a farmer holds the exclusive privilege of distilling, the duty is from $2\frac{1}{4}$ to 4 rupees a gallon for proof spirit. Much of the spirit consumed in the Madras presidency is made from sugar at large distilleries worked with modern appliances. The number of licensed retail spirit shops was reduced from 17,736 in 1888–89 to 11,974 during the year 1892–93; the licenses for the sale of foreign liquors were 693 against 741 in the preceding year. The quantity of foreign spirit imported into Madras was 180,083 gallons, or 522 gallons less than in the previous year. The total quantity of licit spirits issued from the distilleries, reduced to London proof strength, was 879,149 gallons against 928,023 gallons in the preceding year 1891–92. There was thus a decrease of about 6 per cent. in the consumption.

The number of licensed toddy shops was 18,755 in 1892–93 against 26,180 in the year 1888–89. The number of licensed shops for opium and its preparation was 1,030, besides 246 shops licensed for the sale of other narcotic drugs. The total quantity of opium consumed rose from 66,083 lbs. in the year 1891–92 to 72,907 lbs. in the year 1892–93. The consumption of ganja and bhang was 1,667 maunds.

The total excise revenue of Madras fell on the population at the rate of about $5\frac{1}{2}$ annas per head in all. The number of persons prosecuted for offences against the excise laws was 24,255 against 20,645 in the previous year, and 97 per cent. of those tried were convicted. The number of reported cases of illicit distillation and possession of illicit spirits rose from

1,755 to 1,853, while the reported cases of illicit manufacture of toddy increased from 11,957 to 14,834. The increase in the number of excise offences is ascribed to the energy of the preventive staff, and to the extension of the tree tax system for toddy. Excise.

In the Bombay presidency the central distillery system obtains nearly everywhere, and the area over which the outstill and farming systems prevail consists of two comparatively uncivilised tracts in the Panch Mehals. In several of the minor Native States the British system of excise management has been adopted; in some others the chiefs have engaged to manage their excise affairs so as to avoid competition with British excise arrangements. The main peculiarities of the Bombay system are, that spirit must be sold of specified maximum or minimum alcoholic strength; and that in some districts a tax is imposed on every toddy tree that is tapped for its juice. In the Bombay presidency spirits are distilled from fermented mowra (or mhowa) flower and from fermented toddy, or juice drawn from incisions in the trunk of three or four species of palms. The general fiscal results of the excise management of the last two years were :— Bombay.

| Receipts from | 1891-92. | 1892-93. |
|---|---|---|
| | Rx. | Rx. |
| Locally-made liquors, including toddy | 852,794 | 877,241 |
| Licenses on foreign liquors | 11,072 | 11,202 |
| Opium | 105,105 | 92,733 |
| Intoxicating drugs | 29,811 | 30,804 |
| Miscellaneous items | 14,906 | 8,344 |
| TOTAL EXCISE Rx. | 1,013,688 | 1,020,324 |
| Import duties on liquors for Bombay and Sind | 239,967 | 231,941 |
| TOTAL REVENUE Rx. | 1,253,655 | 1,252,265 |

The rate of still-head duty ranges from four rupees to one rupee per gallon of London proof spirit; and the average over the greater part of the presidency is about three rupees per gallon.

The number of licensed shops in Bombay and Sind during the past four years is returned at,—

| | 1889-90. | 1890-91. | 1891-92. | 1892-93. |
|---|---|---|---|---|
| For— | | | | |
| Country spirit | 2,993 | 2,960 | 2,930 | 2,863 |
| Toddy | 2,093 | 1,873 | 1,803 | 1,793 |
| Drugs other than opium | 1,309 | 1,312 | 1,241 | 1,253 |
| Opium | 1,281 | 1,283 | 1,248 | 1,162 |
| Imported liquor | 471 | 479 | 475 | 412 |

There were no changes of system during the year; but rates of still-head duty were enhanced in Bombay city and in some districts of the interior; the rates of tax on toddy trees were also enhanced in four districts of Guzerat and the Konkau. The increase of revenue on country spirits accrued chiefly in Sind, Guzerat, Thana, and Khandesh; and was attributed in part to the satisfactory character of the season. The total consumption of excised country spirits in the presidency proper has been 2,572,000, 2,525,000, 2,457,000, and 2,576,000 gallons of spirit, 25° under London proof during the past four years; so there has been no great increase. The

Excise. consumption of opium in British Districts fell to 1,550 maunds in 1892–93 from 1,715 maunds in the previous year and 1,837 maunds the average of the three years 1889–90.

Berar. In Berar the excise revenue demand of the last three years has been as follows :—

| | 1890–91. | 1891–92. | 1892–93. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| Country spirit | 128,850 | 138,309 | 138,637 |
| Opium and drugs | 30,723 | 30,080 | 26,497 |
| Toddy | 4,596 | 4,568 | 4,591 |
| Foreign liquors | 165 | 180 | 185 |
| Total | 164,334 | 150,902 | 152,251 |

The revenue on country spirits was still raised by selling annually at auction the monopoly of the spirit trade in the 68 circles into which the province was divided, but considerable changes of system were introduced into two districts from the 1st April 1893. The uncollected revenue at the end of the year was Rx. 4,782 against Rx. 1,751 at the beginning. The number of shops licensed for the retail sale of country spirits was 1,122, as in the previous year, and for imported liquors 19 against 18. The number of licensed toddy shops remained unchanged at 973. The number of licensed opium shops was reduced to 478 from 585 in the previous year, and the quantity of opium consumed fell to 460 maunds against 472 in the previous year and 515 maunds in the years 1889–90. The number of licensed ganja shops fell from 586 to 484, and the quantity of ganja consumed from 530 maunds to 437 maunds. Prosecutions under the excise law rose from 57 to 73, and under the opium law from 117 to 137. There were five prosecutions for smuggling opium, and several ingenious attempts to smuggle the drug were frustrated.

## STAMPS.

Stamps. The stamp revenue is leviable under Act VII. of 1870 (the Court Fees Act), which imposes fees on plaints, petitions, and other documents filed before civil, criminal, or revenue courts, and under Act I. of 1879 (the Stamp Act), which imposes duties on commercial transactions recorded in writing, such as conveyances, bonds, cheques, bills of exchange, receipts, and the like. The following table gives the receipts and charges, province by province, for the year 1892–93 :—

| | Bengal. | North Western Provinces and Oudh. | Punjab. | Burma. | Central Provinces. | Assam. | India, General. | Madras. | Bombay. | Total. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Sale of court fee stamps | 1,119,393 | 541,025 | 256,631 | 95,715 | 119,378 | 57,124 | 29,598 | 454,325 | 322,180 | 2,995,369 |
| Sale of commercial and other stamps. | 431,441 | 172,256 | 149,326 | 57,184 | 49,159 | 24,065 | 22,634 | 271,496 | 196,639 | 1,374,200 |
| Fines and miscellaneous | 3,750 | 1,975 | 4,423 | 2,590 | 494 | 3·7 | 472 | 10,628 | 54,297 | 78,971 |
| Total Stamp Revenue of 1892-93 - Rx. | 1,554,584 | 715,256 | 410,385 | 155,489 | 169,031 | 81,526 | 52,704 | 736,449 | 573,116 | 4,448,540 |
| Total of 1891–92 - Rx. | 1,510,046 | 693,518 | 406,930 | 132,398 | 169,503 | 82,083 | 48,087 | 674,757 | 544,834 | 4,262,156 |

The refunds of the year were Rx. 53,744, and the charges of collection came to Rx. 141,264. There was an increase in revenue of 4½ per cent. as compared

compared with an increase of 5 per cent. in the previous year, for the whole of India. Court fees still yield rather more than two-thirds of the whole stamp revenue, and general stamps yield something under one-third. The increase in the year 1892–93 accrued under both classes of the stamps; but increase in the receipts from commercial stamps has for some years been proportionately larger than under court-fees. The increase was notably large in both Upper and Lower Burma. In nearly every province there was the usual advance in the revenue from general or commercial stamps; but in some provinces, especially the Panjab, there was a decline in the revenue from judicial stamps. STAMPS.

## CUSTOMS.

No change in the tariff was made during 1892–93. It will be seen from the following statement of the gross realizations from import duties that there was an increase under each main head. CUSTOMS.

GROSS RECEIPTS FROM IMPORT DUTIES.

| | Arms, Ammunition, &c. | Liquors. | Opium and Miscellaneous. | Petroleum. | TOTAL. |
|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1887–88 - - - | 22,370 | 527,792 | 255 | 13,709 | 564,121 |
| 1889–90 - - - | 23,866 | 559,265 | 285 | 162,392 | 745,808 |
| 1891–92 - - - | — | — | — | — | — |
| 1892–93 - - - | 31,162 | 610,253 | 456 | 202,309 | 844,174 |

The gross receipts from export duty on rice fell from Rx. 881,957 to Rx. 743,356. The total net customs revenue, excluding receipts on salt, was Rx. 1,558,000, as compared with Rx. 1,654,000 in the year 1891–92, and Rx 1,608,000 in the previous year.

## PROVINCIAL RATES.

Provincial rates are levied for the most part on the land. They are imposed under the law to meet charges for local roads, local schools, local sanitary work, local postal arrangements, and in some provinces for village police. In the temporarily settled provinces the rates take the form of a percentage on the land revenue, and the revenue payers and tenants have to pay that percentage in addition to the land revenue. In Bengal the cesses are levied by a rate upon the rental, and are payable partly by landlord and partly by tenant. The net receipts under this head were Rx. 3,698,649 in the year 1892–93, as against Rx. 3,497,000 in the preceding year; nearly one-half of the whole pertains to the provinces of Bengal and Madras; in the latter province the system of local funds and local administration has been carried out successfully for many years. In Bengal about half of the rates belongs to the Provincial Government; in the North Western Provinces nearly one quarter is similarly credited; in other provinces the whole, or almost the whole, of the provincial rates income is spent on local objects by local bodies. The provincial rates increase with the land revenue, and in Bengal the road cess may be increased by votes of the district boards within the legal maximum, or by alteration in the periodical valuations of the rental. The provincial rates are collected punctually with the land revenue and by the same agency. PROVINCIAL RATES.

PROVINCIAL RATES.

The following is a table of the rates and cesses collected during the year :—

| REVENUE. | India, General. | Bengal. | Assam. | North-Western Provinces and Oudh. | Punjab. | Central Provinces. | Burma (Lower). | Madras. | Bombay. | TOTAL. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| District Local Fund: | | | | | | | | | | |
| Cess on Land for expenditure on Roads, Schools, Hospitals, and general purposes. | 2,076 | 409,531 | 54,950 | 455,490 | 221,382 | 31,472 | 102,082 | 515,762 | 265,528 | 2,058,273 |
| Provincial: | | | | | | | | | | |
| Cess on Land for expenditure on Roads, Schools, &c. | — | 419,526 | — | 32,972 | — | 351 | — | — | — | 452,849 |
| Cess on Land for Famine Assurance, Canals, and Railways. | — | — | — | 170,059 | 55,289 | 14,814 | — | — | — | 240,162 |
| Cess on Land for District Post - - - | — | 43,741 | — | 3,663 | — | 3,785 | — | — | — | 51,189 |
| Cess on Land for Village Service and Patwaries. | 3,256 | — | — | 236,092 | 128,768 | 45,718 | — | 390,742 | 36,396 | 840,972 |
| Assessment on Wards' Estates for Establishment Charges. | — | 7,868 | — | — | 2,917 | 3,357 | — | — | — | 13,942 |
| Miscellaneous - - - - - - - | 2,090 | — | — | 40,255 | 600 | — | — | 6,166 | — | 49,111 |
| TOTAL Receipts - - - | 7,422 | 880,466 | 54,950 | 938,531 | 408,956 | 99,497 | 102,082 | 912,670 | 301,924 | 3,706,498 |
| Refunds - - - - - - - | — | 1,485 | 17 | 1,393 | 484 | 48 | 46 | 2,758 | 1,618 | 7,849 |
| Net Receipts, 1892–93 - - - | 7,422 | 878,981 | 54,933 | 937,138 | 408,472 | 99,449 | 102,036 | 909,912 | 300,306 | 3,698,694 |
| Net Receipts, 1891–92 - - - | 6,949 | 849,708 | 54,783 | 937,306 | 398,866 | 99,983 | 99,776 | 746,512 | 303,491 | 3,497,374 |

INCOME TAX.

INCOME TAX.

General.

There was no change in the Income Tax Law [Act II. of 1886] during the year, or in the rate at which the tax was levied. The principal provisions of the Act are, that incomes derived from salaries, pensions, and interest on securities, if amounting to Rs. 2,000 per annum, should pay five pie in the rupee (2·6 per cent.), and if less than Rs. 2,000, four pie in the rupee (about 2 per cent.); that companies should pay five pie in the rupee on their net profits; and that income derived from other sources should pay according to a graded scale from Rs. 10 on Rs. 500 to Rs. 42 on Rs. 1,999, the tax on incomes of Rs. 2,000 and upwards being five pie in the rupee. All incomes of less than Rs. 500 a year are exempted, and the tax is not levied on profits or incomes derived from agriculture (which are otherwise taxed under legislation imposed in 1877–78), or on military salaries of less than Rs. 500 a month.

The receipts and charges on account of income tax in each province were as follows :—

| | Gross Collections. | Refunds. | Net Receipts. | Charges for Assessment and Collection. |
|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. |
| Bengal - - - - - - - - - | 429,855 | 5,260 | 424,595 | 18,409 |
| North-Western Provinces and Oudh - | 231,712 | 2,109 | 229,603 | 1,880 |
| Punjab - - - - - - - - - | 134,953 | 892 | 134,061 | 1,111 |
| Burma - - - - - - - - - | 76,473 | 426 | 76,047 | 1,705 |
| Central Provinces - - - - - - | 41,507 | 473 | 41,034 | 52 |
| Assam - - - - - - - - - | 23,632 | 43 | 23,589 | 107 |
| India, General - - - - - - - | 148,340 | 906 | 147,434 | 98 |
| Madras - - - - - - - - - | 202,844 | 1,560 | 201,284 | 1,741 |
| Bombay - - - - - - - - - | 388,171 | 3,946 | 384,225 | 5,068 |
| TOTAL, 1892–93 - - - | 1,677,487 | 15,615 | 1,661,872 | 30,171 |
| TOTAL, 1891–92 - - - | 1,652,823 | 14,726 | 1,638,097 | 29,577 |

The

Income Tax.

The taxable minimum of income is lower than in the United Kingdom; but the average of earnings and of the cost of living is also much lower in India. The total assessment represents, in round numbers, a taxable income of Rx. 65 millions from securities, companies, trades, and professions; and this total, though not in all respects comparable, is small by the side of the total annual value of 413 millions assessed to income tax under Schedules C., D., and E. of the British Act during the year 1890. The contrast is the more marked because the population of British India is nearly six times as great as that of the United Kingdom. About three-fifths of the whole income tax revenue is paid by the provinces of Bengal and Bombay. A very large share is in each case contributed by the presidency town; Calcutta yielded one-half of the whole income tax levied in Bengal, though it contains less than 1 per cent. of the population of the province; and Bombay city, with a population of 800,000, paid Rx. 172,000 of income tax on trades and professions, as compared with Rx. 125,000 on trades and professions paid by the rest of the presidency, with a population of 18 millions, and as compared with Rx. 50,000 paid on Government salaries and interest on Government securities. From most provinces it is still reported that the income tax is an unpopular form of taxation; but the objection is rather against the levy of such a tax at all, and against the taxable minimum being as low as Rx. 50, than against the manner of its working. The proportion of income tax paid by official salaries and pensions continues to be high everywhere in comparison with the total receipts. The large number of objections against assessments, and the considerable proportion of successful objections, go to show that the persons assessed are ready and able to defeat attempts at excessive taxation on the part of assessors. The objections are almost entirely against assessments on trade and professional incomes under Part IV. of the Income Tax Schedule.

Provincial details.

In Bengal the number of objections against assessments was 11,640, as compared with 12,388 and 15,027 in the two previous years; about 36 per cent. of the objectors were more or less successful, as in the previous year; and the final demand was 3 per cent. below the original assessments, the same proportion as in the previous year. In about two per cent. of the 103,894 assessments property was distrained, and in one-third per cent goods were sold for the realisation of the tax. The total receipts in Bengal showed a decrease of 1·8 per cent., as compared with 1891–92.

In the North-Western Provinces and Oudh, out of 66,393 assessments the number of objections was 21,013; 31 per cent. of the objectors were in some degree successful, the same proportion as in the previous year; and the final demand was 5 per cent. below the original assessment, as in 1891–92. Notices of arrear were issued in 4,363 cases, and in 753 cases further coercive measures had to be taken against defaulters; in 193 cases attached property had to be sold for arrears. The total receipts showed an increase of 1·5 per cent over the previous year. The number of persons assessed was $1\frac{1}{2}$ per mile of the whole population. Of the whole tax 77 per cent was paid by trades and professions.

In the Punjab the number of objections against 42,948 assessments under Part IV. was 11,181, of which 37 per cent. were successful, being the same proportion as in the previous year; and the final demand was $5\frac{1}{3}$ per cent. below the original assessment, as compared with 7 per cent. in 1891-92. Rx. 719 of the year's demand were uncollected at the end of March. The total receipts in the Punjab showed an increase of $2\frac{1}{4}$ per cent. on the receipts of the previous year, the increase being mainly under Part IV., namely assessments on trading and professional incomes. More than 20 per cent. of the whole collections accrued on salaries and pensions. The number of coercive processes issued against was considerably smaller than in the previous year.

In Burma the income tax was applied to all Government servants and to 46 towns in the lower province; income taxpayers were exempted from capitation tax. In the year 1892–93 the number of objections preferred against 12,905 assessments under Part IV. was 3,862, of which 62 per cent. were more or less successful; and the final demand was 9 per cent. below the total of the original assessments. In 729 cases warrants were issued against defaulters, as compared with 2,161 in 1891–92. Of the whole income

INCOME TAX.

tax revenue in Burma in 1892–93, 55 per cent. was paid on salaries, pensions, and profits of companies. The total receipts of the year 1892–93 were Rx. 4,000, or 6 per cent. larger than in the previous year.

In Assam the yield of the tax was 1 per cent. less than in the previous year. The number of objections was 1,372, against 5,543 assessments under Part IV.; 572 objections were successful in whole or in part; and the final demand under Part IV. was 10 per cent. below the original assessment. Processes for the realisation of arrears increased 14 per cent.; but in only 10 cases was the property of defaulters sold for arrears, against 16 in the previous year. The proportion of collections on salaries and pensions under Part I. paid by Government was 18 per cent.; on salaries paid by companies under Part II. it was 37 per cent.; and on trades and professions under Part IV. it was 42 per cent.

Against 54,334 assessments in Madras 21,379 objections were preferred, of which 32 per cent. were more or less successful, and the final demand was $8\frac{1}{2}$ per cent. below the original assessments, as against $7\frac{1}{2}$ per cent. in the two previous years. Of the total number of assessments 91 per cent., and out of the total demand $51\frac{3}{4}$ per cent., were on account of incomes below Rx. 200 a year. In 29,765 cases notices had to be issued against defaulters, but in only 160 cases was any property sold or further action taken on account of arrears. Only ·5 per cent. of the revenue due remained unrealised when the report for the year was submitted. The demand for the year showed an increase of $7\frac{1}{2}$ per cent. over that for 1891–92; nearly the whole of the increase accrued under Part IV. (Commerce and Trade) of the Act; and 69 per cent. of the total demand came under that part. The assessments fell at the rate of one in 529 on the whole population.

In Bombay the number of persons originally assessed to income tax was 8,192; from 13 to 31 per cent. of the persons assessed in different parts of the presidency objected to the assessments; from 3·4 of the objections in Sindh to 5·4 of the objections in Bombay city were successful; and the final assessments were Rx. 319,000, against original assessments of Rx. 335,000.

Of the total increase Rx. 10,270 accrued in Bombay city, and Rx. 5,199 of this was due to the large profits made by the railways on the great wheat traffic of 1892. In Bombay city, notwithstanding a serious depression in trade and great fluctuations of exchange, there was a decrease of only Rx. 800 in the collections under Part IV. (Commerce and Trade) of the Act. In all divisions of the interior of the presidency the collections showed some increase over the previous year. Almost the whole of the tax was collected without difficulty.

## CHAPTER VI.

## SURVEYS AND SETTLEMENTS.

THE work of "The Survey of India" is divided under five heads, namely :— SURVEYS AND SETTLEMENTS.

1. Trigonometrical Survey.
2. Topographical Forest Survey.
3. Cadastral Survey.
4. Special Surveys and Explorations.
5. Map Productions.

The account given below of progress under heads one, two, four and five relates to the work of the season 1891-92.

Out of 21 survey parties, and six small survey detachments, employed during the year, only one party was engaged on trigonometrical work. Triangulation was effected in Upper Burma for a distance of 195 miles and over an area of 4,300 square miles ; nine principal triangles were completed, and seven principal stations were newly fixed, besides six stations in the secondary series that were begun. It was found that the latitude and longitude of Mandalay, which had been previously determined by Major Hobdoy's astronomical observations, were wrong by 3.5″ in latitude, and 1.2″ in longitude, an extremely small error. Trigonometrical.

Three parties, and two detachments, were engaged on topographical work, and accomplished in all 9,909 square miles of topographical survey, as against 10,193 in the preceding year. Party No. 10 completed 1,692 square miles of survey in the southern Mahratta country, and 841 square miles in Guzerat, of which province the survey was completed ; in both tracts parts of the area were mountainous and clad with forest. Party No. 15 effected a detailed reconnaissance for a line of railway communication between Kurrachee and Kharan ; another carried the triangulation of the Mekran series to the borders of Persia, following the 26th parallel of north latitude ; while the third and fourth section effected topographical surveys of small special areas, and brought up arrears of map work. The total out-turn by the party was 12,418 square miles of triangulation, 19,084 square miles of geographical survey, and 629 square miles of topographical work. A detachment effected 765 square miles of topographical survey in the tin-bearing lands of Mergui to the south of Burma, besides making surveys of 81 separate tin mines. A second detachment effected the triangulation of 7,000 square miles, and a topographical survey of 4,426 square miles of country behind Aden ; the area is roughly a semi-circle, with a radius of about 70 miles, described with Aden as a centre, and extends from the coast to the borders of Turkish Arabia. Party No. 18 surveyed 245 square miles of State forests in the district of Kangra, and 284 square miles in the Native States attached to the Simla district. Topographical.

Four parties were, as in the previous year, employed in mapping the forest reserves. Party No.14 carried on surveys in the Hoshungabad and Nimar forests of the Central Provinces ; they completed 483 square miles of detail survey, including classification of soils and forest growth. Party No. 17 was engaged in the reserved forests of the Poona, Thana, Sholapar, Kolaba, and North Kanara districts of Bombay ; 437 square miles of detail survey were accomplished, the short out-turn compared with the preceding year being partly due to a severe outbreak of fever among the staff. Party No. 19 was engaged in the forest reserves of Coimbatore, Madura, and Tinnevelly ; 659 miles of detailed survey were accomplished, a larger out-turn than in any previous year ; the cost per square mile came down to 97 rupees, against 112 rupees, and 162 rupees in previous years. Party No. 20 effected the survey of 294 square miles of reserved forests in the Toungoo district of Burma. Detachments surveyed 327 square miles of forest in Jalpigoree, and 45 square miles in the Simla Hill States. The whole area of forest surveys accomplished by all these parties during the year was 2,245 square miles, against 1841 square miles in the previous year.

Cadastral Survey.

The work of the cadastral and traverse survey parties is noticed below under each of the provinces where they were employed.

Surveys and Settlements.

Geodetic

The geodetic work of the year consisted of the measurement by electro-telegraphic observations of six longitudinal arcs in northern, central, and southern India. The Surveyor General reports that this work has now been completed for continental India. Similar work for Burma and Baluchistan can be undertaken at some future date.

Map printing.

The demand for and the production of maps by the Survey of India continues steadily to increase. The number of new maps published during the year was 7,532, of which 4,956 were cadastral maps. In all 853,947 copies of maps and plates of different kinds were printed off during the year, besides 1,318,597 impressions from type. Among notable new maps of the year were an elaborately coloured geological map of India; a coal map of India; and various new railway maps.

Tidal and levelling operations.

The recording of tidal curves by self-registering tide gauges, their reduction, and the publication of tide tables were continued during the year at 14 stations, of which six are permanent and eight are temporary for five years. Two old stations were closed, the five years' observations having been completed; and no new ones were opened during the year. At five tidal stations personal observations were taken daily, to compare actual heights and times of high and low water with those predicted in the published tide tables. The total number of ports treated since 1877, for which tide tables are issued, is 31. The Port Blair self-registering station was destroyed by a cyclone, but was re-established within three months. So far as predictions of high water were concerned, 94 per cent. of the entries in the tables were correct within eight inches of actual heights at open coast stations, and 66 per cent. at riverain stations; while as to time of high water, 76 and 68 per cent. respectively of the entries were correct within 15 minutes. All the observatories except Kurrachee were inspected during the year; and steps were taken to introduce improvements at nine stations.

Levelling operations were prosecuted from Malkhed on the Great Indian Peninsula Railway to Nagpore, thence to Bilaspur on the Bengal-Nagpur Railway, and on to Sakti. There were 452 miles of double levelling accomplished; while the heights of 529 permanent bench marks and 12 stations of the Grand Trigonometrical Survey were determined. This work was considerably more than the previous season's out-turn. The heights previously determined by the Public Works Department were found to be 4½ feet below the true level of 1,025 at Nagpore, one foot below the true level of 999 at Raipur, and 2 feet below the true level of 872 at Bilaspur.

Explorations.

Parties Nos. 11 and 21 continued their geographical surveys in Upper Burma; and sent detachments with various expeditions or political missions that traversed parts of Burma or the adjacent regions. They surveyed on the 1 inch to the mile scale 42,077 square miles in the Upper Chindwin, Yeu, Ruby Mines, Bhamo, and Katha districts, and in the Shan States, Karenni, and the Hukong Valley. Another season will probably see the close of the first survey in Upper Burma, as few gaps are now left in its topography; work with boundary commissions and with expeditions on the frontier or among hill tribes will however remain to be done.

Marine Survey.

The survey vessel "Investigator" with one boat party was employed on marine surveys throughout the open season of 1892-93, the staff being employed in the Chart Office during the rainy months. The principal coast survey work was off the Laccadive and Minikoy Islands, in the Bombay harbour, and on the east coast from the neighbourhood of the Kistna to Pennair. The 20-fathom line was in places at a distance of 22 miles from the shore, and a very large amount of sounding and buoy-shifting was needed. Several new shoals were found and marked; the beacon off Pennair had disappeared with the island on which it stood; and the river mouth had shifted northward greatly, since the date of the previous survey in 1848. The naturalist's report mentions some interesting results of several hauls of the deep-sea trawl off the Malabar and Coromandel coasts; the deepest was at 753 fathoms; but the more remarkable specimens were from hauls of 475 and 559 fathoms at longitude 72 degrees and 81 degrees respectively, and at latitude 150 degrees in either case.

During

During the year 1892–93 meteorological observations were recorded at 174 stations, stretching from Bagdad and Aden on the west to Dibrogar, Bhamo, on the east, and from the Peshawur border on the north to Galle in Ceylon, the Nicobar and Minicoy Islands, and Mergui on the south. The principal new observatories of the year were in the Native State of Mysore, in Burma, on the Thibet border at a point 11,500 feet above the sea, in the Shan States, and at Teheran and Ispahan on the Indo-Persian telegraph line. Arrangement was also made for reports of snowfall from Kabul and places in the Himalayas. Of the 174 observing stations,—

Four were observatories of the first class, where autographically registering instruments are kept to record rainfall, barometric, and thermometric readings, humidity, wind force and solar-actinometric observations.

Sixty-three were second-class stations, where less frequent observations are recorded.

One hundred and seven were third-class stations which record twice a day the rainfall, the thermometric maxima and minima and the range of the barometer.

These observations are communicated in some cases by telegraph to the head-quarters of the Meteorological Department, the chief officers of which are responsible for inspecting observatories and stations, so that instruments may be kept in good order and observations may be faithfully recorded; the Department also undertakes the publication of storm warnings, seasonal forecasts, and periodical compilations of meteorological results. Besides the data furnished by the observatories described above, returns are kept of the rainfall at 2,049 stations; and the Meteorological Department examined and tabulated during 1892–93 the observations in 954 logs of vessels entering Calcutta and Bombay.

The forecast of the probable rainfall for 1892 was founded mainly on information regarding the snowfall on the mountain region to the north and north-west of India, on the distribution of barometric pressure in India and over the Arabian Sea during the month of May, as compared with the meteorology of previous years. The forecast predicted a rainfall below the average in parts of Southern India, in Rajputana, and in Eastern Bengal, and on the Kathiawar coast, but a nearly normal rainfall elsewhere. It is claimed that the actual rainfall showed a fair, and on the whole a satisfactory, agreement with the forecast, excepting that the rainfall was unusually heavy in West Bengal, Western Rajputana and Sind. The average and actual rainfall from June to October in the 12 regions into which India has been divided were as follows:—

| Name of Province or Tract. | Actual Rainfall of June to October 1892. | Average Rainfall for the Five Months. |
|---|---|---|
| | *Inches.* | *Inches.* |
| Burma | 118 | 118 |
| Assam and Bengal | 57 | 57 |
| North-Western Provinces and Oudh | 36 | 34 |
| Punjab (plains) | 22 | 15 |
| Rajputana and Central India | 32 | 27 |
| Central Provinces and Berar | 52 | 44 |
| Madras | 35 | 27 |
| Bombay (North) | 31 | 25 |
| Bombay and Malabar Coast Districts | 62 | 55 |

Surveys and Settlements.

The year was not a stormy one, only two severe storms were observed in the Bay of Bengal, one early in June, and one in the middle of October. The latter cyclone did great harm at Port Blair and then crossed rapidly over to Coconada on the Madras coast. Warning is said to have been given of all considerable storms that visited India or Burma during the year, and this part of the work gave satisfaction to the public; no warning to Port Blair of the October cyclone was possible. The system of flood warnings to canal officers was found to be useful; 162 such warnings were issued by the Meteorological Department during the year. The usual daily weather reports and charts, weekly weather reports published in the official gazettes, and the monthly weather report giving a summary of the weather and the variations from normal conditions, were published regularly.

The proportion of stations inspected and instruments verified by officers of the Meteorological Department was larger than in the preceding year. Forty-four observatories were found to be "satisfactory in every respect;" 18 were said to be "in good order"; and 11 were in an unsatisfactory condition.

Geological Survey.

The operations of the Geological Survey during the year 1892–93 were mainly confined to extra-peninsular India, more especially to the Panjab, Beluchistan and Burma. The examination of the rocks, the identification of fossils and strata, and the completion of the geological map were prosecuted and large gaps were filled in the provinces mentioned above.

The economic work performed by the survey during the year began with the examination of the various coal outcrops near Quetta, in the Harnai valley, and on the Khost side of Beluchistan. Further inquiry showed grounds for a more sanguine opinion than had previously been held of the future of coal in Beluchistan; a good deal of fair coal has been found at a workable level, near to the railway line; and probably much more exists in the neighbourhood, though the coal basin is much broken up by faults and folds, and the coal has in places been carried away by denudation. Parts of the salt range in the Punjab near the Dandot colliery were tested by borings and detailed survey, with the result that further coal was proved, with an available output of probably over a million tons, provided working can be carried to a sufficient depth along the dip. In the Tenasserim valley of Lower Burma further available supplies of coal were found; but the coal can be carried to the sea only by specially constructed barges in a shallow and difficult river, while a railway to these coal sources does not appear practicable. In Upper Burma, coal indications, gold sources and lead mines were investigated in parts of the Katha district. In Wuntho seven different places were shown where the natives used to dig for gold; but so far no workable reefs were found, though the geological surveyor reported that gold had in past times been cleverly worked by the people from the débris of quartz infiltrations into the schistose rocks. No trace was discovered of any quartz having been pounded up for gold washing. In the Pinlebu subdivision a considerable quantity of coal was available; but it was situated 32 miles from the nearest railway station, and for the present cannot be successfully exploited. In the same locality large deposits of lead ore were found, yielding on assay 69 per cent. of lead; it had been worked to a considerable extent by the Shans in former years.

## SETTLEMENTS AND CADASTRAL SURVEYS.

Settlements and Cadastral Surveys.

General

The term "Settlement" is applied in Indian revenue affairs to the process of assessing the land revenue demand. Occasionally in newly acquired or specially backward tracts, the land revenue is assessed for a short term of years on a general review of the circumstances and capabilities of the land and people concerned; such a process is called a summary settlement. But a regular settlement is a more complicated affair, and consists of many stages. In the first place every separate estate or holding is demarcated by permanent marks on the ground; and disputes between neighbouring right-holders are investigated and decided. Every estate or holding is then surveyed and mapped, all boundary marks, wells, and buildings being shown on the field or cadastral maps. Sometimes these field surveys and maps are made by trained professional

professional surveyors belonging to the Survey department. When the field surveys are made by local or village surveyors, such agents are trained by, and their work is independently tested by, professional surveyors. The work of the professional survey, whether cadastral maps or traversing, rests on, and is checked by, the independent scientific work of the Grand Trigonometrical and Topographical Surveys. After the field maps are prepared, the next process is to classify each field according to its productive value, as evidenced by its soil, by the amount of its produce, or by the rent it pays. A record is at the same time drawn up of all rents paid, and of all rights, whether landlord rights, or tenant rights, or rights of user, over all the ground, buildings, wells, and trees shown in the map. Then the assessing officer (or settlement officer, as he is often called) compiles the information obtained for all the lands in a circle of villages; and on a review of all these data, of the past fiscal history of the tract, of the range of prices, of the accessibility of markets, and of other general considerations, he proposes rent rates or revenue rates for the several classes of lands in the circle. In the determination of rent rates or revenue rates for any tract, the rainfall, the sub-soil water level, and irrigation facilities are important factors; but improvements made by the owners or occupiers themselves, are not held to enhance the assessable value of the land. The rent rates or revenue rates proposed by the settlement officer, and the grounds on which they were based, are then investigated by a superior officer, and are not adopted until they have been accepted or modified by him. SETTLEMENTS AND CADASTRAL SURVEYS.

In provinces where the zemindari tenure prevails, that is, where single proprietors or proprietary brotherhoods possess large estates of several hundreds or thousands of acres, the State revenue is assessed at an aliquot part (usually about one-half) of the ascertained or assumed rental. The revenue, though it is fixed with reference to acreage rates on the land actually cultivated, is assessed on, and is payable by, each estate as a whole; the assessment remains unchanged for the 30 years or other period of the settlement; the proprietor can bring as much as he likes of his waste or fallow land under the plough; and it is only on re-assessment at the end of the term of the settlement that the State obtains any increase of revenue on account of the extensions of cultivation during the settlement period. In provinces where the ryotwari tenure prevails, that is where each petty proprietor holds directly from the State, generally cultivates his own land, and has no landlord between himself and the Government, the revenue is separately assessed at an acreage rate on each petty holding, and land revenue becomes payable at once, or after a short term of grace in the case of uncleared lands, on all extensions of cultivation. The ryotwari proprietor is at liberty to throw up his holding or any portion of it at the beginning of any year after reasonable notice; the zemindar or large proprietor engages to pay the revenue assessed upon him for the term of the settlement.

After the revenue is assessed and the assessment is sanctioned, copies of the field map, of the schedule of fields, and of the record of rights are made; one copy is given to the proprietor; one copy is lodged in the district court-house; and usually a third copy is placed in the sub-divisional or tahseel office. Through the agency of the local officials of each village or circle the field maps and record of rights are corrected or written up year by year, so as to make them at all times faithful accounts of current rural facts and circumstances. When revisions of assessment are undertaken at the end of the settlement, the village maps and records serve, after adequate testings and corrections, as the basis for re-assessment; and in this way a re-settlement is a shorter and less costly affair, and causes much less harassment to the people than is involved in an original settlement. At the present time re-settlements have been practically completed in Bombay, and are being made in many districts of the Punjab, the North-Western Provinces, and the Central Provinces; also in parts of Bengal and Assam. Original settlements are still being prosecuted in Madras and Lower Burma, but are now finished in Sind. Re-settlement is beginning in Berar, and has begun in Oudh; while in Upper Burma the settlement of the land revenue has been begun.

In Bengal cadastral surveys and settlements were in progress in the three districts of Orissa, in Chittagong, in the Dooars, and on some hundreds of petty estates and plots in different parts of the province. In the temporarily settled Bengal.

Settlements and Cadastral Surveys.

districts cadastral surveys were effected over 2,775 square miles, at a cost of Rx. 16 per square mile. Field maps and records were completed for the Puri district, and are making progress in Cuttack and Balasdore; the total area as yet cadastrally surveyed in Orissa was 4,105 square miles, and the attestation of holdings had been completed over 1,512 square miles; no revised assessments had been framed by the end of the year. The total cost of the Orissa survey and settlement had reached Rx. 102,000 by the 31st March 1893. The settlement of Angul, which had formerly been a tributary State, was completed at a total cost of Rx. 19,100 for an area of 881 square miles; the increase of revenue (Rx. 2,685) due in 1892–93, the first year of the new settlement, was realised in full, and in only one case had any process to be issued for arrears. In Chittagong the work of attesting the records of holdings was in progress; altogether 2,605,827 holdings have to be recorded, of which three-fifths have been completed. On only one estate was the rental fixed before the end of the year. The cost of the Chittagong re-settlement and survey up to March 1893 had been Rx. 78,000. In the Dooars the settlement is approaching completion; the cadastral survey has cost Rx. 48 per square mile, and the operations had cost Rx. 49,500 up to the end of the year. So far as the latest reports show, the revenue of the tracts assessed has been increased by Rx. 8,300, or 61 per cent. The other settlements were mostly of a petty character; their cost was Rx. 7,196 during the year. The Board of Revenue report that the increase of the year 1892–93 on the Bengal land revenue demand, due to revision of settlement in tracts excluded from the permanent settlements, had been Rx. 21,000, instead of Rx. 19,700, as estimated at the end of the previous year.

North-Western Provinces and Oudh.

In the North-West Provinces and Oudh the re-settlement of the Mozuffarnagar district was finally closed, the cost being Rx. 26,500; the assessments sanctioned during the year yielded an increase of Rx. 6,600, or 19 per cent. on the previous demand. The re-settlement of Jhansi was finally completed after the close of the year, in January 1893; it had cost Rx. 20,300; the revised revenue of the whole district yields an increase of Rx. 6,400, or 13 per cent. on the old demand. In Gurhwal good progress has been made, and it was decided not to extend the costly cadastral survey to the wilder parts of this hilly region. The Kumaon re-settlement is nearly complete; the increase secured in the revenue demand will be Rx. 3,800, and the total cost of the work up to date was returned at Rx. 1,327. In the Unao district settlement work is making fair progress; revised assessments of six tracts had been framed, of which three were sanctioned during the year, yielding an increase of Rx. 6,577, or 18 per cent. on the previous demand; the total outlay to the end of the year was Rx. 14,900. In the Partabgarh and Rae Bareli districts the work of correcting the village papers and maps was pushed on during the year, and assessments for one tract were framed. In the districts of Budaon, Barabanki, and Sultanpore settlement work was begun in October 1892, after the close of the year noticed in this paragraph.

The rent-rolls for all districts of the North-West Provinces and Oudh show that the rental demand of the year 1890–91 was Rx. 12,016,000, out of which the landlords realised Rx. 9,751,000 during the year, besides Rx. 1,097,000 on account of arrears of previous years. The rent-rolls include only the reduced rents paid by privileged tenants, and include no computed rents on account of lands cultivated by proprietors. The cultivated area is approximately held thus :—

| | N.W.P. | Oudh. |
|---|---|---|
| | Acres. | Acres. |
| By cultivating proprietors - - - - | 6,100,005 | 962,122 |
| „ privileged tenants - - - - - | 893,863 | 392,284 |
| „ ryots with occupancy rights - - - | 10,805,858 | 257,457 |
| „ tenants at will - - - - - - | 8,887,239 | 7,366,276 |
| „ rent free - - - - - - - | 434,105 | 283,715 |

If

If the rent rates paid by tenants at will were applied to the total area of the cultivated land the gross rental would amount to Rx. 15,337, or more than 2½ times the Government demand. Settlements and Cadastral Surveys.

No part of the imperial Survey Department was employed on revenue or cadastral survey in the Punjab during the year. In three districts, Hissar, Gurdaspur, and Ferozpur, settlement work was completed during the year; and settlements were in progress in parts of ten districts at the close of the year. As was mentioned in a previous Statement, the work is being done as expeditiously and economically as possible; and no general re-survey is attempted, though on some estates and on occasional tracts the existing field maps are so incorrect as to necessitate a fresh survey. Punjab.

In Lahore assessments have been completed and have been introduced into half the district; the work has lasted 4½ years, and has cost Rx. 30,200. In Amritsar the new assessments have been completed and have taken effect in two-thirds of the district; the enhancement was 32 per cent. on the old demand; and the new revenue was paid "without much difficulty, even though the harvests were poor;" the work had cost Rx. 25,000, and was nearly finished. In Sealkot assessments had been framed for two-fifths of the district; much work remained to be done, and the settlement had cost Rx. 25,000. New assessments have been completed in Gujrat and collected in part of the district; the work has cost Rx. 20,000, and has yielded an increase of Rx. 15,000, in the yearly revenue. In Gujeranwala the work is nearly completed; it has cost Rx. 25,000, and will yield Rx. 15,000 of enhanced revenue. In Kangra the settlement is nearly complete; it has cost Rx. 28,000, and has yielded an additional revenue of Rx. 9,700. In Shahpur the settlement is nearly complete and will have yielded Rx. 20,000 of enhanced revenue. In Montgomery, Peshawur, Dera Ghazi Khan, and Kohat the re-settlement was begun during the year.

In Lower Burma one party of the Imperial Survey was employed on the cadastral survey of the Amherst and other Tenasserim districts; this party effected 896 square miles of cadastral work, or 176 square miles more than in the preceding year. A second party was engaged on the topographical survey of Mergui. A detachment of this party effected also 610 square miles of topographical survey in the northern and 679 square miles in the southern districts of Tenasserim. The forest survey party completed 326 square miles of work in the reserved forests of Toungoo. The land revenue of part of the Amherst district, comprising 366 square miles, was settled during the year, with the result that Rx. 6,487 were added to the land revenue demand. The area under supplementary survey,—that is the area for which the field maps and records are tested and corrected yearly, increased from 14,002 to 16,830 square miles; the area included 4,226,615 acres of rice, and 301,207 acres of garden land, and the cost of the work was Rx. 12,300 during the year. The area sold during the year was 280,000 acres against 263,000 in the previous year; the area mortgaged was 113,000 acres against 63,000; and the area redeemed from mortgage was 49,000 acres against 35,000 in the previous year. The average price paid for land increased in every district. The area sub-let to tenants was 722,000, or 16 per cent. of the whole land under survey. The area of waste granted with temporary exemption from revenue was 141,000 acres against 113,000 and 67,000 acres in the two previous years. Burma.

Two cadastral survey parties in Upper Burma effected the survey of 1,766 square miles in the Shwebo and Yen districts, and 1,143 square miles in Minba and Magwe districts. The topographical and geographical work done by the survey department in Upper Burma during the year amounted to over 28,000 square miles. After the close of the year orders were passed on the settlement reports of State lands in the Kyankse and Mandalay districts. Settlement operations were begun during the year in the Sagaing, Minbu, and Meiktila districts.

In the Central Provinces cadastral survey has now been nearly completed everywhere except in the zemindarees, or chiefships, and in a part of Mandla. During the past five years 38,900 square miles have been cadastrally surveyed, and 17,300 square miles have been assessed at a total cost of Rx. 229,000, or 9 per cent. less than the amount estimated at the beginning of the period. The number of fields in the surveyed area has been 14½ millions, Central Provinces.

Settlements and Cadastral Surveys.

of an average size of 1¾ acres. The increase in revenue gained by the assessment has been greater than was expected. It was specially large in Chutteesgurh and the Nerbudda districts, where rentals had increased greatly during the previous 30 years; the increase was smaller in the Nagpore territory, where the ryots had held their own and rents had not greatly advanced. An adjustment of all rents had been a necessary part of every settlement; in the tracts where rents were high rents have not risen more than 5 per cent. at the adjustment now made; in Nagpore on the other hand they have been raised 14 per cent. In parts of Jubbulpore rents have been lowered at the settlement, and the Government demand has been assessed on the reduced rental. The local Government remarks that "the ease and completeness with "which the demand has been collected in the three districts of Chutteesgurh "and Mandla furnish satisfactory testimony of the moderation of the Revenue "Settlement recently effected in these districts, and of the success with which "very substantial increments have been equally distributed, so that the burden "sits lightly on the people, even in years of partial failure of the crops."

Assam.

Cadastral surveys were completed in the Assam Valley in August 1892, and the survey party was transferred to the Surma Valley. During the year the cadastral survey was effected of 825 square miles, of which 492 belonged to the Sylhet district. The final preparation and closing of cadastral work in the Assam Valley was to take place in September 1893. The survey results for the year gave an increase of 11½ per cent. in the previous revenue. Revision surveys were completed over 874 square miles in four districts of the Assam Valley and in Sylhet. The cadastral survey of the Assam Valley has yielded on the whole an increase of Rx. 17,400 in the land revenue, or 8 per cent. on the cost of the operations; the cost per square mile has been gradually reduced from Rx. 49½ in 1883–84, the first year to Rx. 16 in the last year of the work. This increase of revenue is altogether apart from the enhancement of the land revenue rates, the results of which measure will be shown in next year's Statement.

Madras.

In Madras four parties were employed on original cadastral surveys, and two parties on re-surveys during the year 1892–93. The area of original survey effected during the year was 2,356 square miles, or 16 per cent. more than in the previous year; the cost was Rs. 179 per square mile against Rs. 260 per square mile in 1891–92. The area of re-survey in three districts, namely, Trichinopoly, Kistna, and Godavari was 2,335 square miles, and the cost was Rs. 45 per square mile; the out-turn of re-survey work was 60 per cent. above the previous year, but was below the estimate because sufficient village accountants (*karnams*) had not been made available for the duty. In only three districts, and for an area of 3,736 square miles, is any original survey left to be done, and it is expected the original survey of the Madras Presidency will be completed by 1895. The number of copies of survey and other maps struck off during the year was 294,149, or nearly 50 per cent. above the out-turn of the preceding year. The cost of the survey during the year was Rx. 58,128; and the total outlay on survey and settlement, since operations began in 1858, has been Rx. 3,110,000; while the increase of revenue secured has been Rx. 405,000, or 13 per cent. on the outlay. This does not include the increase yielded by the re-settlement, which is now in progress in three districts; the re-settlement in the Tanjore district alone is resulting in an addition of Rx. 110,000, or 30 per cent. to the land revenue. The settlement officer reported that a much larger increase would have been fairly demandable, but the Government decide to limit the enhancement to 11 lakhs. Compared to the value of the land and to the rents realised by landholders (mirasidars), the new revenue of Tanjore is believed to be moderate.

Bombay.

In Bombay three parties effected cadastral surveys of 1,196 square miles, at a cost of 157 rupees per square mile, and classified 5,729 square miles at an average cost of 35 rupees. The cost was higher than in the previous year, because less work was done in the Deccan, where operations are cheaper. The Sind Survey Department surveyed 490 square miles of arable land, and the forest survey was completed over 446 square miles. In Bombay much of the work consisted of revision survey, for which testing and correction of old surveys, rather than complete re-measurement of all lands, are mainly required.

Settlement operations resulted in the sanctioning of revised assessments, by which the old demand of Rx. 194,600 was raised to Rx. 253,100, an increase of 30 per

30 per cent. The increase was justified by the rise in prices, the improvement in communications, and the increase of agricultural well-being that had taken place since the former settlement of 30 years back. The total increase of revenue secured by the settlement revision operations in Bombay up to October 1892 came to Rx. 313,000 a year, or 33 per cent. on the former demand; this increase is outside the yearly increment of revenue due to the extension of cultivation. The cost of the revision operations, exclusive of work in Sind, has been Rx. 523,700. In Sind the settlement has been completed; only a small establishment is retained to measure new land taken up for cultivation, and to keep the village maps and registers up to date.

Settlements and Cadastral Surveys.

## VII.

## LAND REVENUE, INCLUDING FISHERY RECEIPTS AND CAPITATION TAX, AND WARDS' ESTATES.

LAND REVENUE.

THE subjoined table shows the receipts and disbursements on account of land revenue for each province, as entered in the public accounts for the year 1890-91; also the net land revenue for the past two years.

DETAILS of LAND REVENUE and EXPENDITURE.

| | Bengal. | North West Provinces and Oudh. | Punjab. | Burma. | Central Provinces. | Assam. | India, General. | Madras. | Bombay. | TOTAL. |
|---|---|---|---|---|---|---|---|---|---|---|
| REVENUE. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Ordinary Land Revenue - | 3,759,400 | 5,999,415 | 2,223,834 | 1,037,792 | 89,482 | 433,191 | 125,327 | 5,041,130 | 3,641,056 | 23,045,474 |
| Sale of Proprietary Right of Government in Land. | 302 | 165 | 48 | — | — | — | 84 | 633 | — | 1,232 |
| Assessment or quit-rent of alienated lands. | 7,409 | — | 20,606 | — | — | — | — | — | 974,683 | 1,002,698 |
| Sale of Waste Lands and Redemption of Land Revenue. | 2,934 | 65 | 3,006 | 9 | — | 841 | 2,260 | 1,456 | — | 10,737 |
| Capitation Tax or House Tax levied in lieu thereof. | 1,850 | — | — | 377,441 | — | — | 1,471 | — | — | 380,762 |
| Receipts for the Improvement of Government Estates. | 47,370 | — | — | — | — | — | — | — | — | 47,360 |
| Fisheries and other Receipts classed as Miscellaneous. | 30,354 | 45,267 | 108,940 | 200,237 | 5,556 | 38,918 | 9,923 | 114,628 | 28,383 | 582,202 |
| Upper Burma Receipts, apart from Land Revenue proper. | — | — | — | 557,331 | — | — | — | — | — | 557,331 |
| Total Gross Revenue Rx. | 3,849,609 | 6,044,912 | 2,356,434 | 2,267,657 | 695,038 | 472,950 | 139,065 | 5,157,847 | 4,644,122 | 25,627,634 |
| Deduct portion credited to Public Works. | — | 117,498 | 13,725 | — | — | — | — | 506,773 | 84,309 | 722,306 |
| Total in Revenue Accounts - Rx. | 3,849,609 | 5,927,414 | 2,342,709 | 2,267,657 | 695,038 | 472,950 | 139,397 | 4,651,073 | 4,559,813 | 24,905,328 |
| Corresponding Total for previous Year Rx. | 3,867,957 | 5,930,886 | 2,321,461 | 2,142,036 | 701,507 | 466,900 | 138,673 | 3,950,758 | 4,445,596 | 23,965,774 |

In India the State, or the monarch, has always enjoyed a share in the rent or profits from the land. This revenue is levied according to an assessment fixed on estates or holdings. The assessment was fixed permanently 100 years ago on certain tracts paying about Rx. 4,311,000 a year; and it is fixed periodically, for terms of 12 to 30 years, over the rest of India. On large estates, ranging from a few hundred to many thousand acres each, the assessment, periodically fixed, is a share, generally about one-half, of the rental enjoyed by the proprietors; on small estates cultivated by peasant proprietors the assessment is levied on the cultivated area at a rate per acre fixed with reference to the productiveness of the land, and representing about one-half of the estimated letting value. The permanently settled tracts comprise the greater part of Bengal, about one-fourth of Madras, and certain southern districts of the North West Provinces. Of the temporarily settled tracts, the North West Provinces, the Punjab, Oudh, the Central Provinces, and Orissa mainly contain estates held by proprietary brotherhoods or large proprietors; while in Bombay, Burma, Assam, and Berar, and in the greater part of Madras, the land is held and tilled by petty proprietors. In the permanently settled tracts of Bengal the land revenue falls at about two-thirds of a rupee per acre of cultivated land, and represents on an average about one-fifth of the rental,

or

or perhaps one twenty-fourth of the gross value of the produce; in similar tracts of the North West Provinces the incidence of the land revenue is somewhat higher. The average advantages of soil and climate are on the whole greater, and the prevailing rates of rent are on the whole higher, in the permanently settled than in the temporarily settled tracts. In the latter tracts the land revenue represents something less than one-half of the actual or estimated rental, and is probably about one-tenth to one-twelfth of the gross value of the produce. Rates of rent and revenue vary greatly according to the productive power of the land, according to the advantages of climate and rainfall, and according to the facilities for carrying produce to markets or to the sea-board. Payment for water, supplied by State canals or reservoirs for purposes of irrigation, is made either according to the area irrigated or according to the quantity of water used; but the State demand on any land is not enhanced on account of increased productiveness due to improvements made by the proprietors or occupiers themselves.

The gross land revenue of the year 1892–93 shows an increase of Rx. 940,000, as compared with the previous year; but the receipts for 1891–92 were adversely affected by the drought in Southern India, where Rx. 500,000 of land revenue had to be remitted or suspended. On the whole the tendency of the land revenue is to increase gradually and slowly, partly from periodical revisions of the assessment rates after a period of advancing prices, and partly from extensions of cultivation. The increase during the last six quinquennial terms may be thus shown:—

| Period of Five Years from | Average Yearly Land Revenue Receipts of the Period. |
|---|---|
| | Rx. |
| 1861–65 - - - - - - | 19,931,000 |
| 1866–70 - - - - - - | 19,990,000 |
| 1871–75 - - - - - - | 20,965,000 |
| 1876–80 - - - - - - | 21,114,000 |
| 1881–85 - - - - - - | 22,122,000 |
| 1886–90 - - - - - - | 23,432,000 |
| Three years, 1890–93 - - - - | 25,007,000 |

A part of the increase during the last period was due to the acquisition of Upper Burma, which yielded Rx. 167,000 of land revenue in the year 1886–87, and Rx. 662,000 in the year 1892–93.

The progress of the land revenue, the condition of the landed classes, and the relations of these classes to each other are now noticed province by province.



The seasons of 1892–93 were on the whole favourable in Bengal; the autumn crops gave a full average yield, and were estimated to cover 15¾ million acres; the great winter rice crop was returned at over 30 million acres, with an average yield of seven-eighths of a full crop; the spring crops covered a larger area than in the previous year, and gave seven-eighths to a full yield. There was a good jute crop; but the indigo yield was poor. Prices of food grains continued high.

The land revenue demand showed an increase of Rx. 21,015, owing to the conclusion of settlements; and the collections on account of the current year's demand showed an increase of Rx. 3,408; the proportion of collections to the total demand was 95¾ per cent., and 99½ per cent. to the current demand; the collections were not so punctual as in the previous year. Remissions to the extent of Rx. 8,655 were granted, chiefly on Government estates occupied by ryots in Midnapore. The uncollected arrears at the end of the year were Rx. 161,250,

LAND REVENUE.

Rx. 161,250, or Rx. 13,098 larger than in the previous year. Sales of land for arrears occurred in 1,355 cases, out of 16,913 cases in which land became liable to sale under the law. The estates sold were mostly small and of little value; the total arrears due thereon were Rx. 4,764, and 41 estates were bought in by Government for a total price of Rx. 4½. In 146,572 cases, against 159,700 in the previous year, arrears of public demand other than land revenue were taken into court under the certificate procedure, with the result that in 75,976 cases property was attached, in 6,380 cases attached property was sold, in 1,785 cases warrants for arrest were issued, and in 63 cases defaulters were actually sent to jail. The Government have directed, that hereafter no defaulter shall be sent to prison unless there is good ground for believing that he has concealed his property. About half of the certificates were filed on account of arrears of the road cess; and the arrears of this class of business at the end of the year were smaller by 13,777 cases than at the end of 1891–92.

Revaluations of the rental for the purposes of the Road Cess Act were completed during the year in 17 districts. The total demand of the year for the road and public works cesses was Rx. 809,101, showing an increase of 2 per cent. over the previous year; and the collections were considerably more punctual than in the preceding year. The registration of landowners has now been completed for the whole of Bengal except the district of Cuttack; and the percentage of transfers by succession or otherwise that were registered was 5·5 on the total number of interests registered under the initial registration; the corresponding percentages in each of the two previous years was 5·7.

The relations between landlords and tenants were reported to be on the whole satisfactory during the year. From some districts instances of strained relations and of discontent on the part of the ryots are reported; from Midnapore difficulties are reported among the tenants of a European firm which is pressing to the utmost its legal rights against anyone who refuses to grow indigo; in Faridpore and Backergunj there is much ill-feeling, and in two cases murders resulted; from Monghyr rioting and serious trouble are reported on four estates; but in other districts previous disputes have been amicably settled or are quieting down. The making of a survey and a record of rights under the Tenancy Act has settled obstinate and protracted disputes in several districts. The Bengal Tenancy Act, which has now been more than seven years in force, is said to be working smoothly. The Act came into force at the end of 1885; and the returns of suits under the rent and tenancy laws of Bengal for recent years show:—

| | | | |
|---|---|---|---|
| 1884 | - - - | 179,776 | total suits under the Rent and Tenancy Law. |
| 1887 | - - - - | 189,387 | „ „ „ |
| 1889 | - - - - | 201,651 | „ „ „ |
| 1891 | - - - - | 204,250 | „ „ „ |
| 1892 | - - - - | 223,305 | „ „ „ |

During the year 54 landholders applied to have their estates surveyed and settled under Chapter X. of the Tenancy Act. Of these, 44 were private estates, the remainder being Government and wards' estates.

North West Provinces and Oudh.

The latest reports on land revenue affairs in the North West Provinces and Oudh pertain to the year ending 30th September 1892. The autumn rainfall began late but continued till the end of September, the winter rains were light, and the total fall of the year was from 13 per cent. below the average. The autumn harvests were better than in the previous year; the yield of all spring crops was only fair, though better than in 1891. The total area under cultivation showed a decrease of 214,000 acres; the shrinkage occurred entirely in the spring crop area, and was due to abnormally large spring sowings of 1890–91. The area twice cropped during the year was 7,785,000 acres, whereby the total crop area was brought up to nearly 41¾ million acres. The irrigated area was 9,917,000 acres, or 24 per cent. of the total crop area, 8,277,000 acres being irrigated from wells. Prices of food were, on the whole, easier than in the previous year, but they were still high, and pressed e rely on the population of towns. Prices reached famine level in some of the

the hill districts, and the Government had to import grain for the people. The general health of the people was indifferent; cholera was more or less prevalent, especially after the dispersion of the great crowds of pilgrims from Hurdwar and Benares. Cattle disease was not specially rife during the year. LAND REVENUE.

The gross collections of land revenue in the North West Provinces and Oudh under all heads rose to Rx. 7,510,000, as compared with Rx. 7,444,000 in the previous year. Of the increase, Rx. 27,000 were due to the enhancements effected at the resettlement of the Mozaffarnagar district; and Rx. 20,000 were due to the greater demands and payments for canal water. Ninety-nine and a-half per cent. of the demand was collected, and the real as distinguished from the nominal and irrecoverable arrears uncollected at the end of the year were Rx. 29,500. There was less difficulty in realising the revenue, and the total number of coercive processes of all kinds fell to 77,000, against a total of 86,000 during the preceding year. In 11 cases (eight of them concerning the properties of a single defaulter in a single village) land, and in 356 cases, moveables, had to be sold for arrears aggregating Rx. 10,200 in all. The longest period for which any defaulter remained in detention under arrest was 14 days. The total number of defaulters arrested was 7,318. It was noted with satisfaction that the collection for the first time of the enhanced revenue in the district of Mozaffarnagar caused no difficulty, and there were no arrears whatever outstanding in that district at the end of the year. The payment of Rx. 296,000 of land revenue was effected by means of postal money orders.

The number of suits and applications under the rent law in the North West Provinces was 255,765, or 4 per cent. above the total of 1890–91, and was larger than in any previous year. Of the suits, over 90 per cent. were, as in previous years, for arrears of rent. The prominent feature of the year was the large increase in the number of cases for ejectment and enhancement of rent. The number of notices of ejectment brought against privileged tenants was 19,142, or 9 per cent. more than in the previous year, and in 7,197 cases ejectment was effected, but the areas affected by the notices and the ejectments were in both cases smaller than in the previous year. Against tenants at will 64,353 notices of ejectment were filed, affecting 312,341 acres; 27·6 of these notices were contested, and in 9,047 cases, or 52 per cent. of the contests, the tenants were successful. Of the total area occupied by tenants, 10,302,673 acres, or 49 per cent. of the whole, was held by persons possessing tenant rights. The number of notices of relinquishment filed by tenants fell from 18,734 to 17,289; and the number of applications by distraining landlords for sale rose from 21,477 to 25,656. In Oudh the number of suits under the rent law was 34,112, and of applications 14,489; in both cases the total was a little above the corresponding figure of the previous year. Of the suits, 71 per cent. were for arrears of rent; and 42 per cent. of all suits were contested. Notices or applications for ejectment of tenants rose from 8,432, affecting 89,153 acres, to 12,841 cases, affecting 80.613 acres; tenants were actually ejected from 7,167 holdings, with an aggregate area of 44,245 acres. It is reported that forcible evictions of tenants by other than legal process are becoming fewer in Oudh year by year. In 3,194, or 19 per cent. of the appealable suits in the North West Provinces, appeals were preferred to collectors, with a result that in 41 per cent. of the appeals the original decision was reversed or modified; in Oudh 719 appeals were preferred in 11 per cent. of the appealable cases, with the result that the original decision was reversed or modified in 36 per cent. of the appeals. In the combined provinces appeals in 21 per cent. of the cases appealable to judges, who reversed or modified the decisions in 38 per cent. of the appeals coming before them. The percentages in regard to all appeals did not differ materially from the corresponding proportions in the preceding year. The number of applications for partitions was 2,682, or 11 per cent. more than in the previous year, and the arrear business of this kind had increased at the end of the year. The number of loans granted under the Land Improvement Loans Act of 1883 increased to 733, of which 457, for Rx. 9,384, were to landlords, and 276, for Rx. 2,964, were to tenants; under the Agriculturists Loans Act, Rx. 33,477 were advanced during the year. The outstanding amounts for principal and interest under both Acts, at the end of the year was Rx. 93,750; and overdue instalments for principal and interest amounted to Rx. 9,809.

LAND REVENUE. Punjab.

The latest Punjab land revenue report and statistics are for the year ending on the 30th September 1892. The average rainfall of the province for the year was only two-thirds of the normal average; the autumn rains began late, and were intermittent; and there was hardly any winter rainfall. The autumn crops were poor all round; while the spring harvests were much below the average, save on irrigated lands. The total area of crops harvested decreased by 2,127,000 acres, or 9 per cent.; the irrigated area decreased by 113,000 acres, or 1½ per cent.; the irrigated crops covered 7,487,000 acres, or 34 per cent. of the whole area of harvested crops; of the total, 2,852,000 acres were irrigated from canals, the rest from wells; the decrease was entirely under well irrigation, and was due to scarcity of fodder for cattle working the wells; the canal irrigated area increased by 144,000 acres. Notwithstanding the unfavourable season the prices of autumn food grains were not higher than in 1891; but there was a considerable rise in the price of wheat, cotton, of several staple spring crops, and of butter. The fixed land revenue demand was Rx. 29,000, or ¼ per cent. larger, and the collections were Rx. 8,000, or ⅓ per cent. larger, than in the previous year. Owing to the character of the season, Rx. 32,000 of the demand were suspended; but the processes issued for the recovery of arrears were 3,903 fewer than in the previous year.

The number of suits for enhancement of rent rose from 1391 to 1746, and landlords were successful in 82 per cent. of these suits. The number of decrees passed for ejectment of occupancy tenants was 28, and 6,633 decrees of ejectment were issued against tenants-at-will, compared with 5,715 in the previous years; of these notices nearly one-half pertained to the Hissar district. Fifty-five per cent. of the total cultivated area of the province is tilled by proprietors and 45 per cent. by tenants. Of the land held by tenants 77 per cent. is in the hands of tenants-at-will and 23 per cent. is tilled by tenants with occupancy-right. Tenancies at-will increased, and tenancies with occupancy-right decreased during the year. Cash rents range from one-sixth of a rupee in the rainless tracts of the Derajat, up to 50 rupees per acre on the very best irrigated land. On 52 per cent. of the area held by tenants the rent is still paid in kind. There was a decrease of 11 per cent. on the area passing into the hands of mortgagees, as compared with the previous year. The area under mortgage at the end of the year was 4,169,000 acres out of a total of 55,143,000 acres of proprietary lands. Out of the 602,000 acres of waste land in the Central Punjab, which have been made culturable by the New Chenab canal, 236,000 acres had been allotted to colonists who had come from over-peopled districts; 6,453 peasant families were in possession of 206,000 acres; 27,000 acre were cultivated and 20,000 acres more were broken up during the year. Unfortunately the whole population, old residents as well as new comers, were prostrated for some months by fever of a very malignant type.

Burma.

The rainfall of 1892 in Burma, except in five districts of the Upper Province, was heavier than in the two preceding years, and the harvests were better. The rice crop, which covers nearly 90 per cent. of all the cultivated land in Lower Burma, was heavy. The price of rice fell heavily, but relief operations, begun in consequence of the scarcity in 1891, had to be continued in part of the Upper Province up till the middle of 1892. In Lower Burma the cultivated and assessed area increased by 341,000 acres, or nearly 7 per cent. during the year; and the land revenue advanced in even greater ratio. Part of the increase was due to the revised assessment made at the recent regular settlement of the Thongwa district, and to the imposition of maximum rates in parts of Pegu which had enjoyed reduced rates since the regular settlement of 1883–84. The fishery and capitation revenue in the Lower Province also showed a further advance. In Upper Burma there was also an important increase in the capitation tax, which still takes the place of land revenue over the greater part of the country, and in the revenue from State lands. These increases were due mostly to the good harvests. The revenue was realised, for the most part, punctually and without pressure. The balances overdue were Rx. 10,086 under land revenue, and Rx. 735 under fishery revenue in Lower Burma: Rx. 1,842 under capitation tax, and Rx. 17,802 under revenue from State lands in the Upper Province. A new item was added to the fishery revenues of Lower Burma during the year by the lease of the Mergui pearl banks in five blocks for a period of three years at a rental of Rx. 2,681, rising to Rx. 3,325 a year.

The

The large advance made during the year by Burma under all heads of revenue accruing from the land may be seen from the following figures :— LAND REVENUE.

| | Revenue Collections of | | Increase in latter Year. |
|---|---|---|---|
| | 1891-92. | 1892-93. | |
| | Rx. | Rx. | Rx. |
| Land revenue, Lower Burma - - - | 922,600 | 1,021,500 | 98,900 |
| Capitation tax - ditto - - - - | 371,500 | 383,000 | 11,500 |
| Fishery revenue - ditto - - - - | 162,100 | 169,100 | 7,000 |
| Capitation tax, Upper Burma - - - | 430,700 | 468,900 | 38,200 |
| State lands revenue - ditto - - - | 99,200 | 121,200 | 22,000 |
| Forest revenue in the combined provinces - | 418,500 | 566,000 | 147,500 |
| TOTAL - - - | 2,404,600 | 2,729,700 | 325,100 |

The latest land revenue report from the Central Provinces is for the year ending in September 1892. The rainfall was considerably above the average, but it was badly distributed; no rain fell in June, but there were torrents during the next three months. All autumn crops, except rice, suffered from excessive rain; the wheat crop was scanty, but the linseed harvests was good. Prices of all field produce ranged higher than in the previous year; the dearness of the coarser food grains caused some hardship. The land revenue demand was the same as in the previous year, namely, Rx. 676,000. All but Rx. 2,927 (or 0·4 per cent.) of the demand was collected during the year; in eleven districts of the province the demand was collected in full. There was an increase in the number of coercive processes for realisation of arrears, and the total number was 4,706, against 3,990 in the previous year. One defaulter was sent to jail during the year, no land was sold for arrears, and there were only 15 sales of moveable property for default. There was a small increase in the area of land transferred by sale or mortgage; the total area of such transfers was 363,000 acres, as compared with 350,000 acres and 471,000 acres in the two previous years. In most districts the large majority of the transfers of the year were from one landholder to another. Litigation under the tenancy and rent law continues to be as yet small. Suits for arrears of rent rose from 7,371 in the preceding year to 8,709, of which 22 per cent. went in favour of the defendant; the number of notices for ejectment of ordinary tenants fell from 3,123 to 1,636. Out of a total occupied area of 19½ millions of acres, less than 4½ millions or about 25 per cent. are held by tenants-at-will, the remaining 75 per cent. being cultivated by proprietors and privileged tenants; while the average rent paid by ryots of all classes, holding 14¾ million acres, was $12\frac{7}{12}$ annas per acre, or less than one-third of the average rack-rent paid by sub-tenants. Central Provinces.

In the Assam, the rainfall of 1892-93 was above the average; the season was favourable to most crops except tea. The price of rice was above even the high price of the preceding year. The land revenue demand increased by 1¾ per cent. above that of the preceding year; in the year 1891-92 the increase had been 2 per cent. The increase of Rx. 6,500 was mainly due to the operations of the cadastral survey in the Kamrup, Sibsagar, and Nowgong districts. Out of the whole demand, including arrears, 98·04 per cent. was realised, ·04 was remitted, and 1·93 remained at the end of the year still to be collected, as compared with 1·44 per cent. uncollected at the end of the previous year. The remissions made during the year came to Rx. 162, as compared with Rx. 38 remitted in the year 1891-92, and Rx. 124 in 1890-91. The proportion of the settled area to the total area of the province is 17·22 per cent. Six years ago it was 15·92 per cent. There was an increase from 24·408 to 25·851 in the number of notices issued for arrears in the districts of the Assam Valley; Assam.

LAND REVENUE.

Valley; but the number of estates sold for arrears was only 54 as against 73 in the previous year. There was a decrease of 28 in the number of estates sold for arrears in the permanently settled district of Sylhet. In the Assam Valley, the area held under decennial leases continues to decrease; there are now 270,779 such holdings as compared with 273,312 in the previous year. The miscellaneous receipts showed an increase of Rx. 298 over the total of last year, coming chiefly from fisheries and coal royalties.

The number of tea-grants in the province for the year 1892 was 807, and the area held under them was 1,044,984 acres. During the year the number decreased by 21, but the total area of land held under the grants rose by more than 218,000 acres.

The average incidence of the land revenue is 1*r.* 11*a.* 9*p.* per acre for land held on annual leases, and 1*r.* 14*a.* 9*p.* for land held on decennial leases; while special tenures and waste land grants pay much lower rates.

Madras.

In the northern half of the Madras Presidency the season was generally favourable during the year 1892–93; but in the latter part of the agricultural year the southern half suffered from severe drought. Throughout the Presidency the north-east monsoon gave a rainfall of 16 per cent. below the average. Relief works were opened in eight districts, and in May 1893, 80,000 persons were employed on them. The district most seriously affected was Kurnool. During June and July the condition of things improved, and the favourable character of the south-west monsoon, in the districts most affected, made it possible to close all relief works by September. The area under crop exceeded by more than 2,000,000 acres that of the preceding year, and by nearly 1,000,000 acres the average area of the 5 preceding years, the figures being for 1892–93, 26,404,477 acres; for 1891-92, 24,309,168 acres; average for five years ending 1890–91, 25,473,586 acres.

The latest report on land revenue affairs in Madras pertains to the year ending on the 30th June 1892, that is to the season preceding the year to which the foregoing paragraph relates. The total area under occupation by raiyats in the districts for which statistics are available, was 21,157,000 acres, or 0·8 per cent. over the area of 1890–91, which was previously the highest on record. The increase in the occupied area was largest in Bellary, Malabar, and Nellore. The occupied area for the whole of the Madras Presidency exceeded the area occupied in the year 1875–76, before the great famine, by 5·67 per cent. Of the occupied area 79·6 per cent. bore crops. During the 10 years previous the proportion of cultivated to occupied area had averaged 85 per cent., and the falling off in this year was due to the badness of the season. Owing to the same cause the remissions of revenue rose from 15½ lakhs in 1890–91 to 37 lakhs, and the total land revenue demand for the year showed a decrease of 22½ lakhs as compared with the preceding year.

Bombay.

The season of 1892–93 was on the whole favourable in the Bombay Presidency, except that Sind suffered at the beginning of the year from drought, and later from floods. The staple crops yielded, as a rule, good returns; and prices were somewhat below their normal level, except in Sind, during the earlier part of the year. The gross cropped area of the Presidency, so far as figures were available, was 25,815,000 acres, the increase on the area of the previous year being about 960,000 acres, or 3·9 per cent. The collections on account of land revenue were Rx. 3,703,363, being Rx. 133,961, or 3⅓ per cent. larger than in the preceding year. The revenue was collected with exceptional and most satisfactory facility; in Bombay proper and Sind the number of occupancies was returned at 1,467,281; and the number of warrants of distraint issued was 816, as compared with 1,445,259 and 2,453 respectively in the previous year.

Berar.

The rainfall of 1892 in Berar was nearly 40 per cent. above the average, and the crops of both the autumn and spring harvests were injured by excessive and untimely rains. The price of millet (jowari), the food of the people, was considerably dearer than in the two previous years; in some parts it was twice as dear as in the year 1890–91. The public health generally was good throughout the year. The total area under crop was 6,805,000 acres, or 140,000 acres more than in 1891–92; the largest increase was in the millet area, which occupied

33·3 per cent. of the cultivated land of Berar; the area under cotton decreased, and was 31·8 per cent. of the whole cultivated land. LAND REVENUE.

The land revenue demand of the year, including cesses, showed an increase of only Rx. 264, raising the total demand to Rx. 697,000. Of the demand actually due for the year less than one per cent. were uncollected. The number of coercive processes issued against defaulters showed an increase, there having issued 8,336 writs of demand against 6,509 in the previous year; in 21 cases personal property was sold for arrears; 84 fields were also sold; but no defaulters were sent to prison. The area of land transferred by private sale was 110,000 acres, or less than half the total of the previous year; this area is small, as compared with a total of 7,659,000 acres under occupation; the average price fetched was 18 times the revenue assessment. Preparation is being made for the re-settlement of the land revenue of the Province, which has to be accomplished between the years 1892 and 1908, by training local agency to effect a revision survey. The inspection of village records, and of the ryots' receipt books were fewer than in the preceding year; but the proportion of mistakes and irregularities detected was smaller. The number of boundary marks found out of repair on cultivated land was 367,000, of which all on occupied lands, except 13,000, were repaired by the close of the year.

## GOVERNMENT AND WARDS' ESTATES.

In Bengal, 74 wards' estates and 66 attached estates, or four less than in the preceding year, were under the management of the Court of Wards, with a total rental of Rx. 492,118; the collections on account of arrears and current demand came to 97·8 per cent. on the latter, as compared with 99·8 per cent. in the preceding year. The cost of management was 7·8 per cent. on the current rental and cess demand, as it had been in the preceding year. There was spent on schools, dispensaries, and improvement and maintenance of estates a sum of Rx. 57,233. Of the items that made up this total those under the headings of permanent improvements and maintenance show a considerable increase on the preceding year. Debts to the amount of Rx. 107,000 were paid off during the year, and the outstanding debts due from all wards' estates were Rx. 370,000 at the close of the year. The cash balances at credit of wards' estates were Rx. 194,000 on the 31st March 1892, and the investments in Government securities were Rx. 484,000. Fourteen estates were taken over, and 12 released by the Court of Wards during the year. One of the newly-received estates showed a rent-roll of Rx. 2,300, and debts of Rx. 48,200. The 12 estates released during the year were burdened with debt to the amount of Rx. 170,000 when first taken over by the Court; Rx. 135,000 of debt had been paid off, Rx. 20,000 had been spent on improvements, and Rx. 30,000 had been saved or invested in respect of these 12 estates at the time they were returned to their owners. On the Srinagar estate a survey and record of rights was prepared at a cost of Rx. 30,000, with the result that the rent-roll rose from Rx. 26,000 to Rx. 30,300. The tenants of the estate are reported to be well off; and the survey is said to have resulted in the comparative cessation of disputes that used to be very rife. On the great Burdwan estate, which is managed by a Bengali gentleman on behalf of the Court, 99·8 per cent. of the current year's rent was collected during the year; and the old outstanding claims of the estate have been reduced to Rx. 130,000, a sum of Rx. 110,000 having been collected during the year. GOVERNMENT AND WARDS' ESTATES. Bengal.

The education of the young wards is everywhere receiving attention.

The number of estates under the Court of Wards in the North-Western Provinces and Oudh at the end of the year 1891–92 was 153, with a total annual income of Rx. 562,000. Thirteen estates were restored to their proprietors during the year, entirely free of debt, excepting one small property; many of the released estates had been increased in value during the minority of the owners. Against the estates under the Court there had been debts amounting to Rx. 1,435,000, which were reduced by March 1892 to Rx. 353,000. The cost of management averaged 6 per cent. on the total receipts; and Rx. 13,600 were spent on works of improvement. Of the year's rental, 85 per cent. was collected; North-West Provinces and Oudh.

GOVERNMENT AND WARDS' ESTATES.

collected; Rx. 68,900 were expended in paying off debt; while Rx. 68,500 were invested in public securities, or on mortgage, or in the purchase of lands and houses; and Rx. 3,400 on giving help to tenants. The number of notices of ejectment of ryots fell from 421 to 355, of which 94 per cent. were decided against the tenants; and there were 9 suits for enhancement of rent, the average rent being raised on the average of these cases, from $1\frac{1}{8}$ to 2 rupees per acre.

Punjab.

At the end of the year 1892–93, 64 estates were under the management of the Punjab Court of Wards; and five estates were surrendered to their owners during the year. The excess of income over expenditure was Rx. 31,918, as compared with Rx. 18,527 in the previous year. Special attention was paid during the year to the due investment of surplus funds, in order to prevent the ward, when he attains his majority, from finding ready to hand a large accumulation of cash, or of investments easily convertible into cash.

Central Provinces.

In the Central Provinces the Court of Wards relinquished the management of 19 estates, with a rental of Rx. 7,600, and received charge of four estates. At the end of the year 131 estates, with a gross income of nearly 17 lakhs of rupees, were under management. In all the four estates newly undertaken, management was assumed at the request of indebted proprietors who have been declared, at their own wish, incapable of managing their own property. The Court of Wards collected $93\frac{1}{2}$ per cent. of the rental of the year. The cost of management was less than 8 per cent. of the gross actual income. The amount of tenancy litigation on lands under the Court of Wards continues to decrease. Of the debts due by embarrassed estates nearly Rx. 20,000 were paid off during the year, and Rx. 120,491 were still due at the end of the year. About Rx. 120,000 were spent on the permanent improvement of, and in advances to ryots in, solvent estates; and Rx. 4,685 were invested in Government securities or landed property.

Madras.

The Court of Wards in Madras during the year 1891–92, the latest for which information is available, handed four estates back to their proprietors, and took charge of seven estates; there were thus 55 estates under the Court at the end of the year, as compared with 52 at the beginning. In two of the estates surrendered the rental had, in consequence of bad seasons, decreased during the time they were under the Court; in the other two, both the rentals and the cash balances showed a considerable increase. There was, in consequence of the unfavourable season, a decrease of 6 per cent. in the cultivated area as compared with the previous year. The total current collections of the year were Rx. 234,096, and they amounted to 79 per cent. on the current demand, or 3 per cent. worse than in the previous year. The cost of management and of State assistance came to 11·1 per cent. on the total receipts of the year. The balance at the credit of all estates, invested and uninvested, at the end of the year was Rx. 606,792 more than at the beginning of the year. The debts due by the estates at the end of the year were Rx. 175,661, debts amounting to Rx. 13,998 having been paid off during the year. The expenditure on works of irrigation and other improvements was Rx. 18,642. The progress in education of the 61 wards, 52 males and 9 females, and their relations, was said to have been in most cases good. The older minors on certain estates were instructed in Revenue Law and Accounts, in order that they may be able to manage their estates when they attain their majority.

Bombay.

In Bombay the estates under the Court of Wards or under Government management were of several kinds, namely:—

| | No. |
|---|---|
| (1.) Estates under the Court of Wards, outside Guzerat - - - - - - - - | 83 |
| (2.) Encumbered estates in Guzerat, &c., managed under Acts of 1862, 1881, and 1884, and under the Civil Procedure Code; and talukdari villages - - - - - | 600 |
| (3.) Encumbered estates in Sind - - - - | 30 |

The aggregate area of the 83 wards' estates outside Guzerat was 151,892 acres, and most of the estates are of small area.

The

Government and Wards' Estates.

The estates of the second category are all in Guzerat, and are under the care of a special revenue officer, in addition to his duties as assistant collector. The total rental of these Guzerat estates was Rx. 76,000, out of which Rx. 68,000 were collected. Payments to creditors were Rx. 10,700, besides Rx. 7,500 repaid on account of Government loans; Rx. 19,800 were paid as Government land revenue; maintenance of the owners and their families cost Rx. 15,200; and Rx. 14,000 were invested in Government securities and land on account of minors. The revenue of the talukdari (or proprietary) villages under the special officer's charge was Rx. 36,800, of which 89 per cent. was collected. The minor proprietors are receiving instruction. The revision survey of the Talukdari villages by a party of the Bombay Survey was completed during the year. On 30 encumbered estates in Sind, the cost of management ranged from 3 to 4 per cent. in the different districts. Out of a total income of Rx. 7,219, debts were paid off to the amount of Rx. 1,771; while nine estates were freed from debt and restored to their owners during the year; and debts amounting to Rx. 3,410 were still due at the end of the year.

Burma, &c.

There were no wards' estates under the management of public officers in—

| | |
|---|---|
| Burma, | Berar, |
| Assam, | Ajmere, |

during the year.

## VIII.

## FORESTS.

FORESTS. THE subjoined tables give the forest revenue, expenditure, and surplus for each province during the year 1892–93.

| | Bengal. | North-Western Provinces and Oudh. | Punjab. | Burma. | Central Provinces. | Assam. | India General. | Madras. | Bombay. | TOTAL. |
|---|---|---|---|---|---|---|---|---|---|---|
| REVENUE: | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Receipts | 74,488 | 165,254 | 81,263 | 566,000 | 123,085 | 38,283 | 58,283 | 157,721 | 326,955 | 1,591,332 |
| EXPENDITURE: | | | | | | | | | | |
| General direction | — | — | — | — | — | — | 7,743 | — | — | 7,743 |
| Conservancy and Works | 13,303 | 57,641 | 35,763 | 113,891 | 39,478 | 11,664 | 29,671 | 67,080 | 101,011 | 469,502 |
| Establishments | 24,826 | 34,599 | 29,749 | 66,391 | 45,616 | 14,726 | 15,203 | 65,208 | 88,816 | 385,134 |
| Charges in England | — | — | — | — | — | — | 2,846 | — | — | 2,846 |
| TOTAL Expenditure | 38,129 | 92,240 | 65,512 | 180,282 | 85,094 | 26,390 | 55,463 | 132,288 | 189,827 | 865,225 |
| Net Revenue or Forest Surplus | 36,359 | 73,014 | 15,751 | 385,718 | 37,991 | 11,893 | 2,820 | 25,433 | 137,128 | 726,107 |
| Net Surplus of the previous Year, 1891-92 | 36,808 | 77,927 | 38,071 | 251,720 | 55,677 | 6,900 | 5,612 | 38,090 | 135,751 | 646,656 |

General. Some beginning was made in the forest administration and conservancy of Southern India in 1844; 10 or 12 years later similar work was begun in Western and Northern India; the subject was taken up systematically all over India when the mutiny troubles were over; and within the last 20 years forest laws have been enacted for, and forest administration has been placed upon a permanent basis in, every province of India. The superior officers of the forest service have been, for the most part, selected by competition, and have been trained in forestry, either in Germany, or in France, or at Cooper's Hill College; during the past year it has been decided that 20 per cent. of the superior posts in the forest department shall eventually be filled by selected officers from the subordinate or provincial branch of the department. Some of the subordinate officials are trained at a forest school near Dehra in the sub-Himalayan country of the North-Western Provinces, and this system of professional training at local centres will be gradually extended. The first object of the forest administration is to select, acquire, and mark off as reserves an area of State forest in every province sufficient to supply the wants of the neighbourhood and the province in respect of timber, firewood, bamboos, canes, and other forest produce, and sufficient also for supplying the foreign demand for such articles as teak-timber, sandal-wood, and rubber. The reserves are, or will be, surveyed, conserved, and worked on sanctioned plans, designed so as to obtain the largest possible permanent yield in the most economical way. Private rights in the reserves are bought out or compromised. Among the most important measures of conservancy are the exclusion of the yearly fires which used to devastate forests, the maintenance of adequate seed-bearing trees, and the regular re-production of timber of the more valuable kinds. At the present time the reserves cover an area of nearly 70,000 square miles; and they may hereafter be further extended in Madras and Burma, where the work of reservation is as yet incomplete. Outside the reserves are considerable areas of State forest, some part of which will be eventually brought within the reserve area, and all of which is managed and worked for the benefit of the people, of their cattle, and of the public revenue. The limited areas of private forest are, except where they have been leased to the Government, being gradually exhausted; and as yet few private and

and no communal, forests have been successfully brought under conservancy. In every province a very few of the most valuable timber trees are declared to be reserved trees, and can only be felled under special license; outside the reserves the country folk are generally allowed to obtain from the State forests timber, bamboos, firewood, and grass for their own use, free of charge; inside the reserves, only persons specially licensed are allowed to extract timber or other produce on payment of fees. Forest revenue is raised by royalties on, or by the sale of, timber or other produce, and by the issue at specified fees of permits to graze cattle, or to extract for sale, timber, firewood, charcoal, bamboos, canes, and other minor forest produce. In the year 1892–93 the gross forest revenue of British India was Rx. 1,591,332, and the net forest revenue was Rx. 865,225. Some of the better-managed Native States, such as Mysore, Travancore, and Baroda have followed the example of the British Government, have organised systematic forest administration, and enjoy a considerable forest revenue. Mysore has more than doubled its forest revenue since the country was restored to native rule in the year 1881. Forests.

The following paragraphs treat of forest administration in each province. By a recent arrangement the forest reports are now compiled for the 12 months ending on the 30th June; for some provinces the report for the year 1892–93 did not reach the India Office in time for this Statement, and in such cases the facts and figures for the year 1891–92 are given. The figures of revenue and expenditure in the following paragraphs, being compiled from administrative returns, do not agree precisely with the figures given in the table on the preceding page, which are taken from the finally corrected financial accounts.

In Bengal the reckoning of large areas of water surface, and the addition of 500 square miles of protected forest in Singbhum brought the areas of reserved and protected forests up to 5,703 and 3,071 square miles respectively. Forest surveys and working plans were being made for 2,130 square miles of reserved forests; and of the remaining reserves, 1,822 square miles can be managed without surveys for the next ten years. The working plans of the Sunderban forests were sanctioned in July 1893. The report for 1892–93 extends over 15 months, so the out-turns of timber and fuel are not comparable with those for the preceding year. The yield of timber and firewood, most of it from the Sunderban forests, continued at about the same scale as in the previous year. Bengal.

The principal feature of the year's administration was that the Government withdrew from direct departmental working, and left private persons to bring out timber and fuel, after obtaining licenses and subject to paying the prescribed forest dues. There was a decrease in the number of prosecutions for forest offences; 175 prosecutions were instituted, against 120 in the previous year; and the number of offences compounded fell from 1,865 to 1,179. Fire was excluded from 99 per cent., as compared with 96 per cent. in the preceding year, of the 1,890 square miles over which protection against fire was attempted. Of the remaining reserved forests 3,203 square miles are self-protecting. The season was specially favourable for fire protection. Natural reproduction of timber is said to be progressing favourably, especially in the sâl forests and the evergreen forests. The extent of plantations and of cultural operations was increased by 62 acres; and the total area of plantations in Bengal now amounts to 4,497 acres of oak, toon, sâl, and teak.

The forest receipts of the financial year were Rx. 74,488, and the expenditure Rx. 38,160; the receipts and the outlay were both lower than in the previous year, and the forest surplus was Rx. 36,319, or Rx. 3,434 below the surplus of the previous year. Fifty-five per cent. of the revenue, and 25 per cent. of the expenditure pertained to the Sunderban forests.

The forests of the North-West Provinces and Oudh are divided into three "circles," and comprise an area of 3,886 square miles. The figure given for the previous year was 3,916 square miles, but the decrease is merely nominal, being due to the correction of inaccurate earlier measurements. The Central Circle includes the forests of the districts of Naini Tal, Almora, Garwhal, Bijnor, Jhansi and Banda; and its area is 1,830 square miles; the School Circle includes Dehra Dun, Saharanpur, Tehri, Garwhal and the Punjab Hill States, with an area of 812 square miles; the Oudh Circle includes the districts of Pilibhit, Kheri, Bahraich, Gonda and Gorakhpur, and its area is 1,244 square miles. In each circle general working plans for the maintenance and improvement of the forests are in course of execution or preparation; and in addition North-West Provinces and Oudh.

Forests.

addition there is drawn up every year for each division a plan of the forest operations that it is proposed to complete in the course of the year. It is reported from all three circles that in 1892–93 the annual plans were well worked up to. In the Central Circle, which is the most advanced, the work of demarcation and survey is very nearly completed; in the Oudh Circle, which is comparatively backward, work of this kind was pushed forward vigorously, and in order to make clear the position of the Government with regard to land in this circle to which Forest Law is applicable, the records bearing on the subject were examined and republished. During the year it was decided to extend the Forest area of the Central Circle by making the Forest Acts applicable to the waste land in Garwhal, Almora and the Hill Districts of Naini Tal; it is reported from the School Circle that there is in Dehra Dun an an area of 8,638 acres of waste land still at the disposal of the Government for forest purposes. The measures for the protection of the forests from fire were remarkably successful in all the circles. The financial results of the year show a surplus of Rx. 73,014 as compared with Rx. 77,887 in 1891–92.

Punjab.

The area of reserved forests in the Punjab increased by 31 square miles; that of protected forests decreased by 272 square miles owing to the transfer of a large tract to the charge of the officer who superintends the colonisation operations in connection with the Chenab canal. The other State forests of the province increased by 186 square miles. In the work of demarcating reserves, 73 miles of new boundary line were made and 1,500 miles of previously existing lines were repaired, but of 14,000 miles of boundary, 8,300 have now been artificially demarcated, and in 1,100 the natural features make artificial demarcation unnecessary. Surveys were continued in the Himalayan forests of Kangra Kulu and Bashahr by the Survey Department; while in three districts the settlement staff carried on the survey of forest areas; working plans were under consideration for four forests, and were sanctioned for one and were being prepared for three. The attempts to prevent forest fires were more effective than in the previous year. In 1892–93 there were burnt 4 square miles as against 79 in 1891–92. The prosecutions for forest offences fell to 1,256, or 4 per cent. below the number for 1891–92. There was a slight decrease in the quantity of timber and firewood removed from the forests, which aggregated 29,974,000 cubic feet against 31,349,000 cubic feet in the previous year, and the total was very far below the out-turn of 1888–89, when the yield was 43,038,000 cubic feet.

The total forest revenue of the year was Rx. 92,057, against an outlay of Rx. 78,262, yielding a surplus of Rx. 13,794 which compares unfavourably with the surplus of two previous years, which were Rx. 37,980 and Rx. 17,086. The fall in revenue was attributed to the dulness of the timber market, which prevented the sale of any large stocks of timber.

Burma.

An area of 12 square miles was added to the reserved forests of Lower Burma, bringing the total area of reserves up to 5,615 square miles. In 430 square miles of the reserves the privilege of cultivating hill gardens has been secured for the forest-tribes. Permanent boundary marks are maintained round all reserves. In Upper Burma proposals have been made for reserves, aggregating 5,311 square miles out of a total of 16,461 square miles of protected forests; private rights in 1,024 square miles were settled during the year; and the area of actual reserve was 1,059 square miles on the 31st March 1892. Nearly all the best teak forests are in the hands of people holding leases from the ex-king, and some of these leases run until the year 1906.

Detailed valuation surveys were completed over 287 square miles of forest, regular working plans were completed for areas aggregating 407 square miles. For other forests an annual plan of operations is prepared under the Forest Code, and, after sanction by the Conservator, is carried out, until such time as a regular survey and working plan can be made. In Upper Burma regular surveys and working plans cannot yet be undertaken; but linear valuation surveys are being made; rough surveys and working plans are being gradually prepared. In Lower Burma fire protection was very successful, by reason partly of the occurrence of frequent showers during the hot season; from 496 square miles of deciduous forest, or 99 per cent. of the protected area, fire was excluded, as compared with 368 square miles, and 83 per cent. in the preceding year. In the Upper Burma teak forests, where the rainfall is often less than in Lower Burma, no systematic efforts are yet made for the exclusion of fires save in two

or

or three small areas where comparatively little success was achieved. In Lower Burma the area of new plantations was 3,240 acres, 28 per cent. more than had been planted in the preceding year, but 600 acres of the new plantations in the Tenasserun failed; exclusive of this latter area the plantations, chiefly teak, now cover about 45 square miles. The teak worked out of the forests decreased by 3,153 tons in Lower Burma, and by 43,180 tons in Upper Burma as compared with the previous year; the decrease in Upper Burma was due to the early fall of the river. There was a decrease in the forest revenue and forest surplus, which for the past five years have stood thus :— FORESTS.

| | | Gross Forest Revenue. | Forest Surplus of Revenue over Expenditure. |
|---|---|---|---|
| | | Rx. | Rx. |
| TOTAL for Upper and Lower Burma | 1887–88 | 251,576 | 136,191 |
| | 1889–90 | 494,078 | 338,840 |
| | 1890–91 | 432,196 | 298,353 |
| | 1891–92 | 418,514 | 254,181 |
| | 1892–93 | 566,000 | 391,265 |

The arrivals of teak by the Salween river at Moulmein were 74,165 tons or 28,198 less than in the previous year; the arrivals at Rangoon by the Irrawaddy and Sittang rivers were 80,793 tons or 36,959 tons less. The export of teak from Burma by sea was 161,967 tons, as compared with 175,115 and 184,431 tons in the two preceding years. The fall in exportation does not appear to have been due to competition from Siam, as the exports of teak from Bangkok also fell off. Of the teak shipments from Burma about a quarter went to Europe. The average value of the teak exports was Rx. 7¼ per ton or a small fraction dearer than in the previous year.

The area of reserved forest in the Central Provinces remained unchanged at 20,373 square miles, of which 9,189 square miles were at the end of the year 1891–92 classed as A. or permanent reserves, and 10,884 square miles were classed as B. reserves. The B. reserves are available either for eventual transfer to the A. class, or for possible extensions of cultivation in future years; 158 square miles were so transferred from the B. to the A. category during the year. The demarcation of reserves made progress and was practically completed in all but two districts; the boundaries of all A. reserves were in good order. Surveys preparatory to the formation of working plans were being prosecuted in seven districts, but no progress was made with regular detailed working plans during the year. Out of the reported offences against forest laws 7,859 were compounded under sanction of competent officers, and in 239 cases prosecutions were undertaken, in nearly three-fourths of which convictions were secured; in some districts orders were issued that less stringency should be exercised in enforcing the forest laws against villagers, who are the chief customers for and consumers of forest produce. Fire was excluded from 94 per cent. of the 3,870 square miles over which fire protection was attempted, at a cost of 13½ rupees per square mile. The area under protection was 635 square miles larger than in the previous year. The area of failure was 6 per cent. against 5 per cent. in the preceding year; and there was a decrease of 1¼ rupees in the cost of protection per square mile. No regular plantation work is attempted in the Central Provinces; natural reproduction of timber is said to be good in all forests so long as grazing and fires are excluded; even where cattle have not been excluded, the regrowth over a considerable part of the forests is said to be satisfactory; in some cases a few years of closer protection have produced a marked change in the character of the forest. The animals sent into the forests to graze were 2,939,856 against 2,820,556 in the previous year. The forest revenue of the year was Rx. 135,900, against an expenditure of Rx. 71,400, leaving a surplus of Rx. 64,500, or Rx. 8,100 more than in the preceding year. Increase of expenditure Central Provinces, 1891–92.

Forests. expenditure was due to the enlargement of the forest staff. The increase of revenue was caused by a general advance in the quantity of charcoal, bamboos, and minor produce removed from the forests by consumers. Important changes were introduced during the year, with the view of suiting the forest system to the capacities and convenience of the people.

Assam, 1891–92. The reserved forests in Assam were increased by 10 square miles, bringing up the total area to 3,612 square miles. Forest surveys were continued in the sal forests of Goalpara; topographical survey and valuation were completed for 180 square miles; but no permanent working plans were framed. Fire protection was not very successful; fires raged over 13 square miles, or 12 per cent. of the whole area over which attempt was made to exclude fire; most of the reserves consist of evergreen forest wherein fire protection is not needed. The boundaries of reserves are mostly streams, rivers, and roads; out of 1,164 miles of boundary line, 1,103 were cleared and properly maintained during the year. The plantations, principally planted with rubber, now cover 2,306 acres, of which 50 acres were stocked during the year. The oldest trees of the rubber plantations were put in 20 years ago; and many of these have attained a height of 50 to 67 feet and a girth of 6 to 10 feet. Natural reproduction and growth of forest trees is said to be satisfactory everywhere except in the sal forests of the Garo Hills. The attempt to induce the tribes, who cultivate with the axe, to sow their clearings with timber trees are not meeting with success. The yield of the Assam forests shows an increase, the total out-turn of timber and firewood being 4,855,000 cubic feet as compared with 4,554,000 in the preceding year; the total yield is still considerably below that of 1888–90. The yield of tea boxes, however, nearly doubled during the year. The export of rubber from Assam increased from 4,844 maunds in 1890–91 to 5,903 maunds; but it is still considerably below the totals of 1887–89. The quantity of bamboos taken from the forests during the year showed an increase of 8 per cent. under the head of free grants. The forest revenue was Rx. 33,600, and the forest surplus was Rx. 6,860, or Rx. 2,566 more than in 1890–91.

Ajmere and Coorg. The area of the Forests of Ajmere-Merwara was about 140 square miles, as in 1891–92. The year was favourable for both natural and artificial reproduction. Progress was made with the preparation of the Record of Forest-Rights, and a report preliminary to the construction of working plans was drawn up during the year. The financial results showed a deficit of about Rx. 120 as against a profit of Rx. 581 in the preceding year. This change was due to the decrease in grazing fees and the increase in the expenses of the Forest Establishment.

Coorg, 1892–93. The area of reserved forests in Coorg was 114 square miles, being slightly less than in 1892–93, besides 779 square miles of protected forests. During the year 371 miles of old boundary lines were cleared, 71 miles of new lines were cut, and old roads were repaired; old buildings were repaired and the construction of new was begun. Additions were made to the plantations of sandal, teak, and firewood. Owing to the recent extension of fire-lines there was a great decrease in the area burned during the year; the figures being, for 1890, 28,484 acres, for 1891, 16,274 acres, for 1892, 9865, acres. The number of cattle grazed in the forests was 17,245 as against 15,802 in the previous year; but the increase was prejudicial to the natural reproduction of the forests. There were cut and removed 342,311 cubic feet of timber, 220,900 cubic feet of fuel, 367,772 bamboos, 1,641 rupees worth of minor produce. The financial results of the year show a surplus of Rx. 10,758 as against Rx. 9,603 in the previous year. The teak and sandal-wood plantations have been attacked by the borer insect, on the extermination of which the future success of the plantations depends.

Madras. An area of 2,441 square miles was added to the reserved forests of Madras during the year 1892–93, bringing the total area of reserves up to 9,436 square miles. There are about 7,700 square miles of other Government forests from which reserves have still to be selected. Permanent marks were placed along 2,837 miles of reserves boundary, as compared with 2,443 in the preceding year; and 2,627 miles of preliminary demarcation work were also done. Surveys of the reserves were continued by the Survey of India in the Madura, Salem, and Arcot forests, and 718 square miles were completed. Permanent working plans were prepared for two forests and two plantations, while statistics and information were being collected for working plans in several other reserves: meanwhile, for the plantations on the coast temporary working plans

plans are being carried out. Fire protection was attempted over 5,100 square miles of which 95 per cent. were successfully protected, against 94 per cent. in the previous year. The cost of fire protection averaged 13 rupees per square mile for the 15 months ending 30th June 1893. Natural reproduction was satisfactory in all three circles, except in the casuarina plantations of Nellore and in certain reserves of the central and southern circles where fire protection had not been attempted. The additions to the plantations were confined to the southern districts; the total area of plantations was returned at 20,988 acres, besides 28,392 square miles of groves. The valuable timber plantations consist of teak in Malabar, eucalyptus on the Nilgiri hills, and casuarina on the eastern coast. The yield of the forests, according to the returns, was 2,966,566 cubic feet of timber, and 12,138,565 cubic feet of fuel, besides bamboos and other minor produce; the timber bamboos and fuel all gave smaller out-turns than in 1891–92; under the head of minor produce only was there some increase of yield. The forest revenue was Rx. 196,581 against an expenditure of Rx. 163,892, leaving a surplus of Rx. 32,689, or Rx. 10,200 less than in the previous year, and Rx. 22,000 less than in 1890–91. FORESTS.

The area of reserved forests in Bombay was 10,321 square miles, or 151 more than in the preceding year, 1891–92. The protected State forests outside the reserves were returned at 4,197 square miles. There remained still 1,176 square miles of reserves and 2,987 square miles of protected forests, in which private rights have not yet been settled and recorded. This business was effected over only 56 square miles during the year. Forest surveys were carried out over 434 square miles of reserves at a cost ranging from Rx. 12 to Rx. 20 per square mile; working plans are as yet ready and sanctioned for a part of the Thana forests only. There was an increase of 22 per cent. in the number of forest offences; the number of prosecutions was 1,549, against 1,689 in the previous year, and in 78 per cent. of the cases convictions were obtained; and 15,581 offences were compounded by competent officers under the law. Fires traversed 1,914 square miles, or 21 per cent. of the total forest area of the northern circle against 22 per cent. in the previous year; in the southern circle 25 square miles suffered from fire out of 1,046 square miles over which protection was attempted, while fires traversed 26 per cent of the area of the forests not specially protected; eight square miles out of the Sind forest reserves were burnt. Natural reproduction is said to have been satisfactory in all areas from which fire was excluded. In the northern circle the regular plantations increased from 6,096 acres to 6,683 acres, while cultural operations extended over 318,420 acres of hill-side against 291,817 acres in the previous year; on some of these formerly bare hill-sides very satisfactory forest estates are being formed. There was a large increase in the yield of petty timber and firewood from the *coupes* in the northern circle; but the badness of the season greatly reduced the demand for forest produce of most kinds in the southern and Sind circles. The total receipts of the three forest circles of Bombay were Rx. 328,000, against an expenditure of Rx. 192,000, leaving a surplus of Rx. 136,009, or Rx. 7,500 less than in the previous year. The receipts from grazing dues showed an increase of 20 per cent., and amounted to Rx. 58,600. Bombay, 1892–93.

The forest area of Berar is 4,233 square miles, of which 1,322 are reserved for timber and fuel, 63 for fodder and thatching grass, and 1,598 for pasture, while over 1,250 square miles settlement is still pending. The area decreased by 203 square miles during the year, 3,183 square miles having been added and 2,980 having been excluded. The revenue showed a general falling off. The expenditure rose considerably, the chief increase being in outlay on buildings and communications. 32 miles of new cart-roads were made and 326 miles were repaired. Fires were excluded from 763,545 acres out 792,626 acres attempted, at a cost 7-2-0 rupees per acre. During the year the Berar Forest Law of 1886 came into operation. Natural reproduction shows a marked advance in the Ellichpur Division, where the soil is good and where there is adequate protection against fire and grazing. Berar.

## IX.

## AGRICULTURE AND MINERAL RESOURCES.

Agriculture

In every large province of India an Agricultural Department has been organised, which is charged with the duty of supervising the maintenance of the village records of land tenures, rent, produce, and land transfers, and with the work of organising and directing State undertakings for the furtherance of agriculture, and for the improvement of stock. The Agricultural Departments also assist the local officers to keep the public and the Government informed concerning the condition and the out-turn of the crops, the range of prices, and the approach of dearth or famine in any particular tract. It is chiefly from information contained in the annual reports of the Agricultural Departments that this chapter has been compiled.

Bengal.

The rainfall of 1892-93 in Bengal was below the average in six out of the seven groups of districts of the Province. The deficiency was greatest in south-west Bengal, when the monsoon rainfall was 17 per cent. below the normal supply. The early autumn crops covered 16 million acres, the winter rice harvests over 30 million acres, and the spring crops larger areas than in the preceding year; the out-turn for each crop was estimated at seven-eighths of a full average yield, or considerably better than in the year 1891-92. The prices of staple food grains were higher than in the previous year; labourers, whose wages are still very low in Behar and Western Bengal, and respectable folk of the lower middle classes felt the pinch of high prces. But in Northern and Eastern Bengal, where the wages of labour range at two to three times the Behar rate, and where crops were good, the people were prosperous. In the greater part of Chota Nagpore, too, the year was marked by prosperity, especially in Singhbhum, where the newly-opened railway and mining industries had caused a rise of wages. But in Behar the distress due to previous failures of harvests continued, and relief operations did not entirely cease until the favourable rains of September 1892 set anxieties at rest.

Silk.

The silk experiments, undertaken with the view of mitigating or eradicating the disease of pebrine among silkworms were continued by Mr. Mukerji, who had been trained at Cirencester and Lyons, at the Pasteur Institute in Paris, and also in Italy. He worked under a committee consisting chiefly of persons interested in the Bengal silk industry. Out-stations for raising healthy industrial seed from microscopically selected seed were kept up at five places away from the silk districts, where the disease would not be in the air. The eggs reared at experimental stations were bought by about one thousand cocoon-rearers and gave healthy silkworms in almost every case. The distribution of large quantities of healthy seeds is expected to appreciably affect the produce of silk in Bengal.

Agricultural experiments

On the Doomraon Maharajah's experimental farms in the Shahabad district of Behar, the use of saltpetre on previously unmanured land increased the out-turn of sugar-cane per acre by 125 per cent., and converted the average loss of Rs. 6 a. 2 p. 4 per acre on unmanured lands into a profit of Rs. 84 a. 9 p. 7½ per acre. The value of ashes and burnt bones as alternative forms of manures was also demonstrated. As regards methods of planting, the experiments again showed the superiority of the Mauritius trench system over the local method of planting behind the plough. For wheat the use of the soil-inverting plough gave a profit four times as great as the country plough, and on irrigated land crude saltpetre was again found to be one of the most profitable manures. For maize and potatoes experiments showed the value of green manure and bone meal. The model farm of 30 acres, which the Maharajah has made over to a trained Bengali agriculturalist with a view of ascertaining whether the lessons drawn from the experiments of the last few years will make it possible for a farm of small size to become remunerative, showed in spite of very great disadvantages of season a net profit of 7 per cent. after allowing for rent, interest on outlay, and depreciation of stock.

On the Seebpore experimental farm sorghum was grown for fodder with encouraging results, green manure was used for wheat, and the crop that resulted

was

was hardy and abundant; the method of drilling and dibbling the seed was shown to be a great improvement on the native method of sowing behind the plough. The cultivation of oats, a crop otherwise unknown in Bengal, was introduced on the farm; the out-turn was large, but the quality was defective; an attempt is to be made to improve the quality, by the importation of foreign seed and by careful selection and cultivation. Tobacco from Kentucky, Virginia, and Havana was sown, and three native varieties. The American seed failed to germinate, but the other four kinds gave good results.

At the experimental farm on the Maharajah of Burdwan's estate, sugar-cane experiments resulted in a profit of Rs. 105 per acre, from land manured with a mixture of bone meal and castor cake. The Mauritius system of planting gave an increase in profit over the local system equal to three times the additional outlay. Several kinds of green fodder were grown; the increase of yield from sorghum fodder manured with bone meal, led to an increase in out-turn of the estimated value of Rs. 18-12 per acre, the cost of the manure being Rs. 5-10 per acre. Hitherto the general absence of any fodder crops has been a serious obstacle to stock-raising and a drawback to Indian agriculture generally. A manure of cow-dung and castor cake gave a hitherto unequalled out-turn of potatoes per acre.

Crushing bones for manure, which was two years ago made a staple industry for Moslem convicts at the Jalpigoree jail, has now been introduced into the jails at Darjeeling and Saran. Careful trials at the Seebpore farm showed that crushing bones with a pounder worked by human labour was 15 per cent. cheaper than crushing bones in a mill worked by steam. But the neighbouring cultivators have not shown any interest in the manure, in spite of the success of the experiments which have been tried with it.

Efforts to introduce improved ploughs have not been generally successful. Experiments on a smaller scale were conducted on Ward's estates, and on Government estates, under the supervision of the officers of the Agricultural Department. The new crop in which the most general success was obtained was potatoes.

A new method of preparing date-sugar by boiling date juice in deep earthen pans instead of shallow iron pans was tried in Jessore, with results so promising that the method of manufacture is to be applied on a large scale in the coming season.

Eight agricultural exhibitions were held in the Province during the year.

The 106th annual report of the Calcutta Botanical Gardens shows that more than 15,000 specimens were added to the herbarium, among which the principal contributions were from the Kew Herbarium, and from other herbaria in Europe, Asia, Africa, and Australia, as well as from General Sir Henry Collett and other collectors. Collections and botanical explorations continue to be made by persons trained at the gardens, in Assam, Burma, the Andamans, Sikkim, and on the Tibetan frontier.

North-Western Provinces and Oudh.

The efforts made during the year in the North-West Provinces to reclaim *usar* land, or soil impregnated with salt, continue to show, on the four plots under treatment for several years, that mere inclosure, with the hope of securing a good growth of grass or brushwood, does not answer. But embanking, ploughing and manuring have answered fairly well; one plot was sold during the year to a farmer at a price that more than covered the net outlay on reclamation. On another, 43 acres of reclaimed land were let to a tenant at a rent of eight rupees per acre. As grass lands for hay or grazing, or as fuel plantations, the reclaimed plots have not succeeded.

Five private experimental farms and one Agricultural Association were at work during the year; they were all visited by the Director of Agriculture or his assistant. Experiments of value were made with different kinds and varying quantities of manure, also with many kinds of seeds and implements. Mr. L. Persad's farms used means such as an ordinary cultivator could easily adopt: he got yields of potatoes as high as four tons two cwt. to the acre. He showed that by embankment, careful tillage, and good management the condition of poor soil could be improved. And on all these farms useful object lessons were given to ryots of the neighbourhood.

The Seharunpore and Mussoorie Botanical Gardens suffered from the unusually long hot season, from the early cessation of the monsoon

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rains, and from unwonted cold and damp during the winter. The yield of mango fruit was very large, but the harvest of other fruits was poor and strawberries failed. The price of fruit is said to be considerably lower than it was some years ago, in consequence of the large number of gardeners who have taken part in the industry. The demand for trained gardeners continues to be large; 12 were sent out from the gardens during the year, but more were wanted. The number of trees, plants, and seed packets sold or distributed was 96,315, considerably above the previous year's supply for every kind except strawberry plants. So far as the year's experience went, the date-palms, the foreign apples, and peaches failed; not one of the sugar-cane seeds that were sown germinated, but further experiments will be made in reproduction from seed instead of from layers. The successes of the year were with imported maize, with specially large brinjals, with sissal, hemp, and with flower bulbs. The two gardens cost Rx. 2,058, and their receipts, including credits for supplies to medical depôts and to soldiers' gardens, were Rx. 2,161. The gardens are abstaining from experiments with ordinary cereals, cotton, and agricultural crops, which can be better done at the Cawnpore experimental farm, and are being devoted more and more to acclimatising foreign staples and to producing trees, plants, and acclimatised seed for distribution.

Though the season was not favourable, the Lucknow Horticultural Gardens covered 93 per cent. of their cost, by realisations from the sale of trees, plants, seeds, and produce. The number of fruit trees, ornamental trees, and packets of seed, distributed in the Province from these gardens was 28,161, or 63 per cent. more than in the preceding year.

On the Cawnpore experimental farm managed by a Mahommedan officer, trained at Cirencester, the results of the year were not satisfactory. The rains set in late and were abnormally heavy during August and September. Experiments were, as in past years, confined to maize, cotton, and wheat, and were intended to determine the effect of (1) different manures; (2) deep ploughing; (3) early and late sowing; (4) different methods of sowing; (5) the use of sulphate of copper as a preventive of rust in wheat. The maize experiments were inconclusive. With wheat the plan financially most successful was to plant indigo, sell the crop for dye, and to plough in the roots as manure. Nine years' experiments have demonstrated the economy of using an improved plough for wheat, without particularly deep furrows. Early sowings of maize and cotton were found to pay; on canal-watered lands; sowings a whole month before the rains yielded good results. The experiments with sulphate of copper were inconclusive and will be renewed. The average yield of maize on the farm was only 15½ bushels per acre, and of wheat 19 bushels, against 19½ bushels and 21½ bushels respectively per acre in the previous year.

Punjab.

The rainfall in the Punjab was plentiful and the season was favourable for wheat. Both the autumn and the spring crops showed a great advance on the previous year. The area under autumn crops increased by three-and-a-quarter millions of acres, or 37 per cent.; while the area under spring crops increased by more than two millions of acres, or 16·3 per cent. The total area under wheat was returned at 7,400,060 acres. The price of the superior autumn grains rose as compared with the previous year, owing to the fact that the autumn harvest was better in quantity than in quality; but the coarser autumn grains, and the spring produce generally, showed a fall in price. The price of wheat was low, but in consequence of the bad prices prevalent in England there was little export. There left the Province during the first three-quarters of the year only one-sixth of the amount that was exported in the same portion of the preceding year.

Cattle diseases of various kinds broke out in several districts during the year. Rinderpest caused a loss of 6,000 head of cattle.

The Civil Veterinary Scheme, under which the Province obtains the services of two veterinary superintendents and half the services of a third, in place of a single veterinary surgeon to Government, came into force during the year. The arrangements for providing professional superintendence over the subordinate veterinary establishment throughout the Province are now in working order. At the Lahore veterinary school the number of students at the close of the winter session was 89. The results of the examination held in April 1893 were very creditable; out of 56 candidates, 36 obtained first-class and 13 second-class certificates.

certificates. The number of indoor and outdoor patients under treatment continues to increase. AGRICULTURE.

The rainfall of 1892–93 was above the average in all districts but one of the Central Provinces. The early crops of cotton and millet, and the late crop of wheat in the southern part of the Provinces suffered from excessive rain; but, taking the year as a whole, rice, cotton, linseed, and wheat were all satisfactory, the wheat crop being 10 per cent. above the average. The four chief food-grains—wheat, rice, jowari (greater millet), and gram (horse-pea) were, during the greater part of the year, dearer than in the corresponding months of the preceding year. Returns of crops cultivated are available for an area of about 66,000 square miles out of the total of 116,000 square miles; out of that area 36 per cent. was under crop, and 5 per cent. was returned as "current fallows." Of the cropped area, 25 per cent. was under wheat, the same proportion under rice, slightly more under other food-grains, 8 per cent. under linseed, and 4 per cent. under cotton. The progress of survey, which is continually extending the area for which detailed statistics are available, make it impossible to compare together the figures for a series of years. Central Provinces.

On the Nagpur Experimental Farm, experiments are being carried on continuously over a series of years, separate plots of ground being appropriated for each. One fact that has thus been demonstrated by lengthy trials is that manure without irrigation scarcely pays in increased out-turn for its own cost; and this explains the small use that is made of manure in the wheat-growing tracts of the Nerbudda Valley. In combination with irrigation, however, saltpetre, cattle-dung, and other kinds of manure are profitable. Interesting experiments were made to test the advantages of deep ploughing, of heavy sowing, and of the use of green soiling. Cotton, also, both long-stapled and short-stapled, was grown on the farm; and the results were such as to render doubtful the truth of the common opinion, that the short-stapled variety is less profitable to the ryot. Observations were made with reference to the damage caused to wheat crops by trees growing near them; and the conclusion suggested was that the damage is caused, not, as is generally supposed, by the shade, but by the presence of the roots in the soil. Some crops were protected by the digging of trenches round the bamboos and mango trees near them, so as to cut off the surface roots; and the measure was effective.

The condition of agricultural class attached to the farm is generally satisfactory; but students join simply as a means of obtaining Government employment.

The season of 1892–93 was favourable in Lower Burma, and the rice crop in that Province was good. The total area under rice was 5,086,853 acres, while the total area under all other crops was 520,279 acres. The increase in the area under rice was nearly 10 per cent., and there was a considerable extension in the cultivation of sesamum and tobacco. The exports of rice by sea to places outside Burma reached 1,285,000 tons in the year 1893, and exceeded the amount reached in any previous year. Burma.

In Upper Burma the rainfall was heavier than it had been in the two preceding years, and the harvest was, on the whole, better. The imports of rice from Lower Burma reached 112,189 tons, or 40,000 tons less than in the preceding year.

In Lower Burma there was a remarkable fall in the price of rice in 1892–93. At the end of the previous year it had gone as high as Rs. 138 for 100 baskets in Rangoon; in 1892–93 it was from Rs. 76 to Rs. 79 for the same amount. In Upper Burma there was a general fall, not so sudden as that in Lower Burma, but yet as great as 30 per cent. in some cases.

There were 41,943 acres of new grazing ground marked off during the year in Lower Burma. Cattle disease was less severe than in the previous year, and in Lower Burma the number of deaths was 2,000 less.

The rainfall of Assam was about 3 per cent. above the average of the preceding five years, but its unequal distribution injuriously affected several districts. The rice crop was generally fair, but the season was unfavourable for tea. Prices of food ruled high in consequence, partly, of the bad harvests of the previous year, and partly of the rise in the neighbouring province of Bengal. The potato crop in the Khasi Hills was found to have been attacked by the common potato rot of Europe. In some districts cattle disease was rife, the Assam.

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number of deaths reported being 154,290, an increase of 43,300 on the previous year; the resulting loss was estimated at Rx. 126,303, an increase of Rx. 51,667 on that of the previous year.

Crop experiments have been carried on as in preceding years. The chief results with rice have been that the average yield per acre of rice in husk was, in the Brahmaputra Valley, from 1,049 to 1,374 lbs. according to the variety planted; in Sylhet 1,141 lbs. for early rice, and 1,517 lbs. for later varieties; in Cachar, 1,223 lbs. for early rice, and 1,592 lbs. for later; in the Khasi Hills 755 lbs. for upland rice and 946 lbs. for lowland; in the Garo Hills 1,625 lbs. for one of the varieties, and 869 for the other. The net result of sugar cane experiments up to date has been to show that cane yields 47·4 per cent. of its weight of juice, and 8·25 per cent. of its weight of "gur" or molasses, and that the yield of "gur" per acre is 1,470 lbs.

Madras.

The season in Madras during 1892-93 was unfavourable. At the beginning of the year, before the setting-in of the south-west monsoon, and again at the end of the year when the north-east monsoon failed, there were long periods of severe drought. In consequence large advances, amounting to Rx. 227,500, as against Rx. 168,566 in the preceding year, were made under the Lands Improvement Loans Acts and the Agriculturists' Loans Act, and were in very many cases used for well-sinking. Minor irrigation works were carried out at a cost of Rx. 36,404, in addition to the larger schemes under the charge of the Public Works Department.

The season caused severe suffering among cattle in the early part of the year. But the figures concerning disease and death, though they showed an increase over the preceding year, were yet well below the average. Among the bulletins issued by the Madras Agricultural Department were memoranda on the names of the field-crops growing in the Presidency, on the Palmyra palm and its uses, on sugar mills, and on grass-farming in Coimbatore. The more noteworthy results of agricultural experiments during the year are that a small quantity of seed potatoes planted on the Palni Hills gave a fair crop, that palmyra fibre prepared in South Arcot has been found to be valuable for brush-making, and that a considerable export trade in the fibre has sprung up in various parts of the Presidency. In Trichinopoly, attention has been drawn to an extensive deposit of phosphatic nodules, which may eventually be of value for use as manure.

Bombay.

The rainfall in Bombay was generally heavy, and in some parts excessive. The harvests were on the whole good, and prices fell through a large portion of the Presidency. The gross cropped area showed an increase at 3·8 per cent. compared with 1891-92. The new staff for maintaining and correcting year by year the village records of the cadastral survey was further extended during 1892-93, and classes for the education of the officers in survey work were held in nearly all the district head-quarters. The inspection of villages and of crops was carried on satisfactorily through the year.

The Bhadgaon experimental farm, the success of which was prejudiced by the inaccessibility of the site and the dearth of labour in the district, was sold during the year to a private purchaser at a satisfactory price.

The chief results attained during the year by the experiments conducted on Government farms or by private cultivators, were that arrowroot was raised and sold at Ratnagiri, strawberries at Mahábaleshvar, and indigo at Junāgadh. It was found that copper sulphate solution protected sound potato plants from disease, but that the only general remedy was the distribution of robust seed. For this purpose some help has been granted by the Government. At the Poona farm experiments were made to test the feeding value of various fodder-crops. Guinea grass and various kinds of jowāri gave the best results. The dairy herd kept on the farm yielded a good profit.

Government loans to cultivators for permanent improvements and the purchase of seed and cattle, amounted to 6¼ lakhs, and though rather less in amount than those of 1891-92, a year of widespread distress, were double those of 1890-91, and four times those of 1889-90. The local Government reports that cases of misapplication of the loans have been very few. Horse shows were held during the year at Ahmednagar, and at Jacobabad in Sind. The number of exhibits in the former place showed an increase of more than 100 per cent. over the last show held there, and in the latter an increase of 50 per cent. over the last show held in Sind.

Both

Both the early and the late crops in Berar suffered from excessive rainfall. The total area under cultivation was about ·3 per cent. larger than in the previous year, being 7,659,046 acres. The area assessed and available for cultivation was 8,073,883 acres; the area of the Province is 10,296,347 acres. A third of the cultivated area was under millet, about the same proportion under cotton, and a seventh under wheat. There was, as compared with the preceding year, a decrease of 2 per cent. in the proportion of cultivated area under cotton, and a corresponding increase in the area under food-crops. Wheat fell slightly in price, jowari, the staple food of the people, rose 25 per cent., and rice and gram, which is cultivated over 250,000 acres, both rose slightly.

## HORSE BREEDING.

In 1891-92 the Civil Veterinary Department took over the management of horse-breeding operations which were formerly under the direction of military officers. The staff of veterinary surgeons concerned with this business is distributed over the several provinces where horses and mules are bred. These officers in conjunction with the district authorities and local Boards organise and control operations for combating cattle disease, and help in instructing Natives at veterinary colleges. In some parts of India as, for example, through the greater part of the Presidency of Bombay, a staff of inspectors is employed by the department to revise the muster of mares branded as fit for use with Government stallions. The returns of agricultural stock are not complete for all provinces; but the total number of horses and ponies in British India is approximately about 1,300,000, while the number of mules and donkeys is about the same. The North-West Provinces and Oudh return 489,000 horses and ponies and 336,000 mules and donkeys: while the Punjab returns 493,000 mules and donkeys and 226,000 horses. The number of stallions kept by Government for horse-breeding in the year 1892 was 344. The most numerous class of stallions is that of the Norfolk trotters, of which there were 128, and the next is that of the Arab sires which number 106; the Norfolk trotters are popular with Native horse breeders, and their stock win more prizes in proportion than the stock of any other class of stallion.

The number of mares branded for use with Government stallions was 25,537 at the end of March 1892, of which 7,426 in the Bombay Presidency were registered for pony breeding only. Each stallion covered an average of 39 mares during the year; the average number of foals dropped to each stallion employed during the year was 12½; thus about one-third of the coverings resulted in foals. The number of donkey stallions remaining at the end of the year was 312, of which 130 were Italian animals. The number of pony mares covered by Government donkeys during the year was 17,583, and 4,758 mules were reported to have been foaled during the year, or ten per cent. more than in the previous year. From most of the horse and mule breeding districts it is reported that a strong demand exists for more stallions; and it is said that the district boards as well as civil officers are giving much attention to the improvement of horse breeding.

In the Punjab the number of Government horse stallions at work during the year was 108, and of donkey stallions 188, against 121 and 186 in the previous year; the number of mares branded for horse breeding rose from 9,452 to 9,683. The number of mares covered by horse stallions was 5,352; and the average number of foals dropped per stallion rose from 12¾ to 15½. The number of mule foals dropped during the year was 3,171 or 17 to each donkey stallion. The number of horses, mules and donkeys brought to 18 fairs during the year fell from 26,231 to 25,750. It is reported that "the horse stock now seen at "the fairs, and especially those that are put forward as competitors for prizes "are of decidedly superior quality to those of former years." The number of horses bought at the Punjab fairs for army remounts was 691. District boards and other bodies keep 30 stallions in addition to the Government stock.

In Bombay and Sind, there were 94 horse, and 23 donkey stallions at work; the number of mares branded for horse breeding was 3,109. The average proportion of foals dropped to mares covered was 40 per cent. At the chief horse show in Sind 1,365 horses, or 50 per cent. more than in the preceding year, attended, and 80 remounts were bought at an average price of Rx. 23; the number of mules shown at this fair fell to 98 as compared with the previous year. The horse shows of the Deccan were also successful, with 237 and 325 horses

AGRICULTURE.

horses each. The cost of keeping a horse stallion averaged Rx. 38 in Bombay and Rx. 29 in the rest of India; while the keep of a donkey stallion came to Rx. 25 in Bombay and Rx. 14 in the rest of India. The total charge of the horse-breeding department, including prizes, the cost of new stallions, &c., was Rx. 29,000 during the year.

Officers of the horse breeding and remount departments attended at all the more important horse fairs, and the reports of the judges show that almost everywhere the number and character of the young stock continue to advance. The total number of horses and mules brought to 28 of the chief horse fairs of northern India was 56,466, as compared with 54,648 in the previous year. The number of horses bought at these fairs for mounted branches of the public service was 1,167, at prices ranging from Rs. 625 to Rs. 120, and averaging about Rs. 280. A sum of Rx. 3,280 was expended in prizes at horse-fairs, two-fifths of which were contributed by local boards.

## AGRICULTURAL PRODUCE.

WHEAT.

The ascertained and estimated area under wheat is given thus :—

| | Normal Wheat Area for recent Years. | Areas cultivated with Wheat in | |
|---|---|---|---|
| | | 1891–92. | 1892–93. |
| | Acres. | Acres. | Acres. |
| Punjab | 6,505,000 | 6,224,000 | 7,123,000 |
| North Western Provinces and Oudh | 4,901,000 | 4,692,000 | 4,641,000 |
| Central Provinces | 4,077,000 | 3,904,000 | 4,337,000 |
| Bombay | 2,516,000 | 2,176,000 | 2,413,000 |
| Sind | 475,000 | 483,000 | 597,000 |
| Berar | 906,000 | 888,000 | 985,000 |
| Bengal (estimated) | 1,728,000 | 1,300,000 | 1,421,000 |
| Rajputana | 1,562,000 | 1,471,000 | 1,604,000 |
| Rest of India (estimated) | 3,891,000 | 3,344,000 | 3,117,000 |
| TOTAL | 26,561,000 | 24,452,000 | 26,238,000 |

The seasons of 1892-93 were favourable to wheat cultivation. The sowing season was propitious everywhere. In the North-West Provinces, Oudh, Sind, and the Punjab, the abnormal rain of February and March benefited the standing crop. But in the Central Provinces and Berar, where the harvest is earlier, the exceptional wetness of the season injured the wheat, and the crop was poor. On the whole, the wheat yield was computed to have averaged about one bushel above the normal out-turn of nine bushels per acre. Prices of wheat, which had been very high during the year 1892 and at the beginning of 1893, fell considerably in Northern India in consequence of the good harvest. The wheat exports of the past few years have been :—

| | | | |
|---|---|---|---|
| 1,047,000 tons in | 1883–84 | 689,000 tons in | 1889–90 |
| 1,053,000 „ | 1885–86 | 1,515,000 „ | 1891–92 |
| 677,000 „ | 1887–88 | 749,000 „ | 1892–93 |

During 1891-92 the wheat exports rose greatly in response to a demand caused by dearth in Eastern Europe. In 1892-93 the American crop was abundant, and there was less demand for Indian wheat. It was computed that the total wheat exports represented about 14 per cent. of the out-turn of the year in India.

OILSEEDS.

The area under, and the yield of, the main oilseeds crops—namely, linseed, rapeseed, and mustard, for all India is given thus :—

| | Normal Year. | 1891–92. | 1892–93. |
|---|---|---|---|
| Area in acres | 17,179,000 | 17,513,000 | 17,096,000 |
| Yield in tons | 968,000 | 1,022,000 | 1,102,000 |

The

The yield was best in the rapeseed area of the Punjab and Bombay, but on the whole the year was favourable for these crops. The heavy rain of February and March injured the linseed plants in the Central Provinces and Berar. The exportations of linseed were only 390,000 tons, against 543,000 tons of rape and mustard. The value of the oilseed and exports during the year 1892-93 was Rx. 7,415,000, or about the same as the value of the year's wheat exports, which came to Rx. 7,440,000. AGRICULTURE

The rice harvest in 1892-93 was up to the average in Burma, which yields the greater part of the exportable rice-surplus, but was below the average in Bengal and Madras; in some parts of these Provinces it did not exceed half an average crop. The total normal area under rice in British Provinces is said to be about 59,000,000 acres, of which 32,000,000 belong to Bengal, 5,750,000 to Burma, and the same area to Madras; the Bengal rice area is said to have shrunk to 30,000,000 acres in 1892-93. The total quantity of rice exported from India and Burma beyond the sea was 1,396,000 acres, or 10 per cent. below the total of the preceding year. Three-fourths of the exports came from Burma; nearly half the exports were sent to Europe, and most of the remainder to further Asia. The quantities of cleaned rice, as distinguished from cargo rice, despatched from Burma continue to increase, and constitute now nearly two-thirds of the Burma exportations. The price of rice ruled somewhat lower at the rice ports, but the great fall in price which has marked the rice market during 1893 did not set in until April 1893. RICE.

The Indian export duty of three annas per maund on rice yielded to the Indian Treasury Rx. 727,000 against Rx. 900,000 during the year 1890-91, the highest figure ever reached. Siam and Saigon, which with Japan constitute the only other considerable rice-exporting countries of the world, levy about the same rate of duty. The exports from these countries in 1892 and in 1893 to Europe were 249,000 and 286,000 respectively, against Burma's exports to Europe of 778,000 and 738,000 tons in the two years, and Bengal's export to Europe of 64,000 and 44,000.

The area under cotton is returned at :— COTTON.

| | Normal Area. | 1892–93. |
|---|---|---|
| | Acres. | Acres. |
| Madras | 1,700,000 | 2,008,000 |
| Bombay and Sindh | 2,727,000 | 3,001,000 |
| Bombay Native States (estimated) | 2,666,000 | 2,566,000 |
| North West Provinces and Oudh | 1,499,000 | 1,311,000 |
| Punjab | 762,000 | 939,000 |
| Central Provinces | 631,000 | 692,000 |
| Berar | 2,231,000 | 2,202,000 |
| Nizam's Dominions (estimated) | 900,000 | 900,000 |
| Central India (estimated) | 290,000 | 290,000 |
| Rajputana (estimated) | 548,000 | 588,000 |
| Other Provinces (including Bengal) and Native States (estimated) | 1,335,000 | 1,335,000 |
| TOTAL | 15,189,000 | 15,832,000 |

The season was unfavourable for cotton, and the yield was below the average everywhere. The short harvests were due mainly to heavy or unseasonable rain. The total yield of cotton in British and Native India in an ordinary season, at an average rate of three-quarters of a cwt. per acre, would be about 11,874,000 cwts. The area under cotton in India, despite low prices and three successive bad seasons, continues to be very large. Cotton is still the most important non-

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non-food crop of India, and it will be remembered, as evidence of the value of this crop to the Indian peasant-farmer, that the cotton crop of Berar in 1889–90, most of which was exported, fetched more than thrice the whole land revenue of the entire province.

The exports of raw cotton from India were :—

| | | | |
|---|---|---|---|
| 1884–85 | 5,066,000 cwts., | valued at Rx. | 13,286,000 |
| 1886–87 | 5,432,000 „ | „ „ | 13,468,000 |
| 1888–89 | 5,331,000 „ | „ „ | 15,046,000 |
| 1889–90 | 6,325,000 „ | „ „ | 18,669,000 |
| 1891–92 | 4,424,000 „ | „ „ | 10,754,000 |
| 1892–93 | 4,789,000 „ | „ „ | 12,743,000 |

TEA.

The cultivation and the production of tea in India for the last three years show :—

| | Area growing Tea, in Acres. | | |
|---|---|---|---|
| | 1890. | 1891. | 1892. |
| Bengal | 85,573 | 90,815 | 92,852 |
| Assam | 231,038 | 241,823 | 247,192 |
| Madras | 5,738 | 5,481 | 5,694 |
| North Western Provinces | 8,766 | 9,374 | 9,374 |
| Punjab | 9,229 | 9,011 | 9,091 |
| TOTAL | 340,344 | 354,504 | 364,203 |

The yield per acre was returned at 394 lbs. in Assam, somewhat higher than in the previous year, and at 399 lbs. per acre in Bengal, or 5 per cent. less than in the previous year. The tea yield per acre fell 10 per cent. as compared with the preceding year in Assam, by reason of the unfavourable weather which prevailed all over the province. In the Bengal tea gardens the season was prosperous. The total exports of India tea are returned at,—

78¾ million lbs. in 1886–87 | 120 million lbs. in 1891–92
107 „ „ 1890–91 | 114¾ „ „ 1892–93

Owing to a rise in price, the value of India's tea exports in 1892–93 was Rx. 6,292,000, or Rx. 324,000 more than in 1891–92, when the quantity exported was 5 per cent. larger. Australia took 3 per cent. of India's tea exports, against 5 per cent. in 1890–91 ; 1 per cent. was sent to Persia, and the rest went to the United Kingdom.

According to the British returns the importations of tea into the United Kingdom have come from China, India, and Ceylon in the following proportions :—

| In the Year | From China. | From India. | From Ceylon. |
|---|---|---|---|
| 1865 | 93 per cent. | 2 per cent. | 0 per cent. |
| 1870 | 89 „ | 9 „ | 0 „ |
| 1875 | 86 „ | 13 „ | 0 „ |
| 1880 | 76 „ | 22 „ | 0 „ |
| 1885 | 66 „ | 30 „ | 2 „ |
| 1890 | 33 „ | 46 „ | 19 „ |
| 1892 | 24 „ | 47 „ | 28 „ |

In 1892 the tea from China was imported at an average price of 8¾*d.* per lb., while Indian tea averaged 10⅓*d.* per lb.

The

The area under coffee shows a small decrease, as compared with the previous year's figures, thus :— AGRICULTURE. COFFEE.

| | 1888. | 1891. | 1892. |
|---|---|---|---|
| | Acres. | Acres. | Acres. |
| Coorg - - - - - - | 82,335 | 62,230 | 59,985 |
| Madras - - - - - | 56,094 | 68,911 | 68,209 |
| Mysore - - - - - | 113,116 | 125,747 | 125,747 |
| Travancore, Cochin, &c. - - | 8,751 | 5,988 | 8,527 |
| TOTAL - - - | 260,296 | 262,876 | 261,468 |

The yield of coffee per acre may be taken at from 3 cwts. for the best European plantations in full bearing to ½ cwt. for inferior Native plantations. The coffee crop of 1892 was good in Coorg and Southern India. The total coffee exports from India were 296,617 cwts. in 1892-93, as compared with 311,864 cwts. in the previous year, and 233,451 cwts. in the year 1890-91.

On the Government plantations of the Darjeeling district in Bengal there were, at the end of the year, 4,331,000 cinchona trees, or 100,000 less than in the preceding year. Of the existing trees nearly four-fifths are of the pure quinine-yielding variety, and less than one-quarter belonging to the cinchonine-yielding variety. During the year 466,000 trees were uprooted for their bark or died, while 184,000 were planted out; all the new plantations have for some years past consisted of quinine-yielding varieties. The harvest of dry bark was 304,000 lbs. The factory produced during the year 3,481 lbs. of cinchona febrifuge and 5,242 lbs. of sulphate of quinine. Quinine is now sold to public institutions and Government offices at one rupee per ounce, while the febrifuge is sold at 10 annas per ounce. The issues from the factory were 3,647 pounds of febrifuge and 5,518 pounds of quinine. The sales and issues of medicine during the year yielded a profit of Rx. 317, after meeting all charges for maintaining the plantations, renewing plant, and working the factory. As soon as the remaining million of red bark trees are used up, it is intended to manufacture only quinine, and to cease making cinchona febrifuge at the Darjeeling factory. The capital cost of the plantation had been repaid by the sale of cinchona drugs in previous years. During the year 1892, 475 lbs. of quinine were put up in 5-grain doses; each dose is carefully packed, and bears simple instructions in one of the vernacular languages of Bengal. The packets are made up by the jail department; and they are issued to local post-masters who, for a small commission, retail them to the public at one pice (one farthing) per packet or dose. As yet the arrangement has been made for Bengal only; when it is extended to other provinces, the demand for quinine, thus brought in convenient shape, and in an absolutely pure state, to the doors of the people is expected to increase indefinitely. Ample ground has been reserved for extending the Darjeeling plantations. CINCHONA. Bengal,

In the Government plantations on the Nilgiri Hills in Madras the cinchona trees are almost all of the quinine-yielding varieties. Drought and the absence of sunshine made the year 1892-93 unfavourable for cinchona cultivation on the Nilgiri Hills. The plantations and nurseries were kept in good order; but there was no demand from outside for seed or for plants. The stock of dry bark in hand at the beginning of the year was 416,000 lbs.; the harvest of the year was 119,000 lbs.; the consumption of the factory was 172,000 lbs., and 2,000 lbs. were issued in the shape of bark. The produce of the factory during the year was 4,933 lbs. of quinine, and 3,139 lbs. of cinchona febrifuge; 3,204 lbs. of the former, and 2,600 lbs. of the latter were sold or issued to Government and municipal or local departments. The number of quinine powders issued to the public by collectors of districts rose to 170,000, from 37,000 in the previous. The expenditure on the plantations during the year was Rx. 7,900, and the receipts, exclusive of the packets sold by collectors, on account of quinine and febrifuge, were Rx, 7,300. Madras.

The area under cinchona on private plantations outside Bengal is returned at 10,862 acres, nearly all of which are in Madras. The exportation of cinchona bark from India by sea, which was 3,074,000 lbs. in 1888-89, and 2,693,000 lbs. in 1891-92, rose to 2,814,000 lbs. in 1892-93.

AGRICULTURE. JUTE.

Bengal continues to be, as heretofore, the only province that produces jute to any considerable extent. The seasons of 1892 and of 1893 have not been favourable to the jute crop. The normal jute area of Bengal is returned at 2,226,000 acres; and the areas under jute in 1892 and 1893 respectively are given at 2,135,000 and 2,144,000 acres. The crop of 1892 was nearly up to the average; the yield of 1893 is put at 15 per cent. short of an average crop. Prices of jute ruled higher. The fluctuations of the jute trade during recent years have been as follows:—

| YEAR. | Exports of | | | | TOTAL. |
|---|---|---|---|---|---|
| | Raw Jute. | | Gunny Bags and Gunny Cloth. | | |
| | Cwts. | Value, Rx. | Number of Bags, and Yards of Cloth. | Value, Rx. | Value, Rx. |
| 1883-84 - - - - | 7,018.000 | 4,592,000 | 70,695,000 | 1,334,000 | 5.926,000 |
| 1887-88 - - - - | 9,643,000 | 6,040,000 | 88,050,000 | 1,746,000 | 7,786,000 |
| 1889-90 - - - - | 10,256,000 | 8,639,000 | 134,660,000 | 2.791,000 | 11,430,000 |
| 1891-92 - - - - | 8 532.000 | 6.848,000 | 143,540,000 | 2,513,000 | 10,084,000 |
| 1892-93 - - - - | 10,537,000 | 7,944.000 | 164.034,000 | 3,238,000 | 11,182,000 |

INDIGO.

The normal area under indigo in India is about 1,100,000 acres, of which one-half belongs to Lower Bengal, about one quarter to the North West Provinces, and nearly one quarter to Madras. The high prices of the previous year led to a considerable extension of indigo in the North West Provinces, the area sown having risen from 200,000 acres in 1891 to 350,000 acres in 1892. In Bengal the season was unfavourable, and the crop poor; in Madras and Northern India the crop was good. Prices ruled high. The average value per cwt. exported rose from Rx. 25 in 1891-92 to Rx. 32 in 1892-93. The total exports of the past five years have been:—

| | Cwts. | | Rx. | |
|---|---|---|---|---|
| 1888–89 - - | 142,000 | valued at | 3.949,000 | Exports by sea, besides about 4,500 cwts. annually exported across the land frontiers of India. |
| 1889–90 - - | 157,000 | ,, | 3,863,000 | |
| 1890–91 - - | 118,000 | ,, | 3,073,000 | |
| 1891–92 - - | 125,000 | ,, | 3,214,000 | |
| 1892–93 - - | 127,000 | ,, | 4,141,000 | |

## MINES AND MINERAL RESOURCES.

MINERAL RESOURCES. Coal.

There was again an important increase in the production of coal in India. The output for the last three years from the principal coalfields has been—

| | Coal produced in | | |
|---|---|---|---|
| | 1890. | 1891. | 1892. |
| | Tons. | Tons. | Tons. |
| Bengal.—Burdwan field - - - - | | | |
| Karharbari field - - - - - | | | |
| Sonthal Pergunnahs field - - - | 1,626,000 | 1,747,000 | 1,920,000 |
| Maunbhoom field - - - - | | | |
| Central Provinces.—Warora field - - - | | | |
| Mohpani field - - - | 137,000 | 192,000 | 132,000 |
| Assam.—Makum field - - - - - | 146,000 | 154,000 | 164,000 |
| Punjab.—Dandot field - - - - - | 41,000 | 61,000 | 66,000 |
| Baluchistan.—Khost field - - - - - | 16,000 | 10,000 | 13,000 |
| Rewah State.—Umeria field - - - - | 78,000 | 70,000 | 89,000 |
| Nizam's Dominions.—Singareni field - - - | 125,000 | 145,000 | 150,000 |
| TOTAL - - - | 2,169,000 | 2,329,000 | 2,538,000 |

The total yield of Indian coal seven years ago, in 1886, was 1,389,000 tons; during the same period the importations of coal by sea decreased from 849,000 tons in 1886 to 634,000 tons in the year 1892; of this 97 per cent. came from the United Kingdom, while 18,000 tons came from Australia, and 1,900 tons from Japan. During the year work began at the Lingadaw coal mine in Upper Burma, and coal therefrom is already used to some extent on the Burma State Railway and in Government river steamers. MINERAL RESOURCES.

Iron is smelted on a small scale as a village industry in many parts of India; and iron ore of surpassing richness is found in the Central Provinces, in Madras, and in other parts. The Barrakur iron works, which possess coal, iron, and lime close to the works and on the main line of railway about 150 miles from Calcutta, have been mentioned in previous statements. These works were begun in 1875; after two successive companies and then the agents of the Government had failed to make them pay, the "Bengal Iron and Steel Company" took them over in 1890-91. New furnaces have been built, new pits have been sunk to the coal seams, plant for casting pipes and for making railway sleepers has been erected. The company turned out during the year 10,047 tons of pig iron and 3,970 tons of castings; they sold during the year 12,917 tons of pig and 4,253 tons of casting. The cost of production has been reduced, and the price has gone up compared with last year. This is the first year in which the company found a market for all the output of the year; their stocks of manufactured iron have been reduced; and their products have given satisfaction to customers. The capital expenditure of the company up to September 1892 was Rx. 185,000, and during the year then ending they had realised a profit of Rx. 14,800 on their sales of pig, and Rx. 4,600 on their sales of castings; the total profit on the working of the year in India came to 10½ per cent. on the total capital, against 5 per cent. in the preceding year. Iron.

The production of petroleum from the principal oil fields has been returned thus:— Earth Oil.

| | Produced in | | | |
|---|---|---|---|---|
| | 1888. | 1890. | 1891. | 1892. |
| | Gallons. | Gallons. | Gallons. | Gallons. |
| Burma.—Akyab field, Kyaukpyu field, and Upper Burma field. | 2,794,000 | 4,641,000 | 5,793,000 | 8,698,000 |
| Baluchistan.—Thal Chotiali field - - - - | 34,000 | 272,000 | 138,000 | 3,000 |
| Punjab.—Rawalpindee field - - - - | 2,000 | 4,000 | 2,000 | 2,000 |
| Assam.—Debroghur field - - - - | — | 14,000 | 23,000 | 22,000 |
| TOTAL - - - | 2,830,000 | 4,931,000 | 6,136,000 | 8,725,000 |

In Lower Burma the oil output of Arakan showed an increase of 45 per cent.; but the increased total was only 308,000 gallons. In Upper Burma a greatly increased yield was obtained from the Yenangyaung field by the Burma Oil Company, which has been at work in the Yenangyaung field for about 18 years, and which possesses a refinery in Rangoon, and has considerably increased its machinery and its staff of skilled American oil-workers. Up to the end of the year the field had not been effectively worked by the other concessionaires. There has been a large decrease in the production of Baluchistan oil, which was formerly used as fuel for engines on the State railway. The Assam oil sources are as yet but little worked; the field is, however, believed to be valuable, and the yield may increase largely when the railway reaches the tract.

MINERAL RESOURCES.

Though the output of Indian and Burmese oil has more than trebled in the past five years, still the importations of earth-oil into India by sea continue to increase, thus: —

IMPORTATIONS of Mineral Oils into India.

| | 1883 84. | 1889–90. | 1891 92. | 1892–93. |
|---|---|---|---|---|
| | Gallons. | Gallons. | Gallons. | Gallons. |
| From United States - - - - | 12,714,697 | 35,882,120 | 27,294,000 | 26,265,000 |
| „ Russia - - - - - | — | 15,961,875 | 28,334,000 | 38,087,000 |
| „ elsewhere - - - - | 1,169,141 | 1,546,163 | 2,734,000 | 2,481,000 |
| TOTAL - - - | 13,883,838 | 53,390,158 | 58,109,000 | 67,086,000 |

The value of the imported petroleum was returned at Rx. 2,690,000 in 1892 93, and at Rx. 2,367,000 in the preceding year. The employment of tank steamers began in 1893, and is expected to make imported oil cheaper, so that there may be a further increase in the use of this illuminant; in 1888–89 forty millions of gallons were valued at Rx. 1,860,000, whereas in the past year 67 millions were valued at Rx, 2,690,000, showing a fall of 14 per cent. in price during the five years.

Gold.

The gold industry in Mysore continues to advance, but down to the end of 1893 only four companies had produced any considerable quantity of gold. The results of eight companies working in Mysore during the last three years have been: —

| | 1888. | 1892. | 1893. |
|---|---|---|---|
| | Ounces. | Ounces. | Ounces. |
| Quantity of gold extracted - - - - | 35,034 | 163,188 | 185,795 |
| | Rx. | Rx. | Rx. |
| Net value of gold extracted - - - - | 193,059 | 980,000 | 1,184,000 |
| Royalty due to the Mysore State, approximately. | 9,652 | 49,000 | 55,000 |

So far as is known, the yield of gold during the year 1893 has been from the Mysore Company 65,409 oz., from the Urigaon Company 75,063 oz., and from the Nandidrug Company 31,223 oz.

Rubies.

No reports of successful results have been received from the Burma ruby mines by the end of the year. There was some delay in payment of their rental by the lessees.

## X.

## PUBLIC WORKS.

The Public Works Department was represented in the Governor General's Council during the greater part of the year by Sir Charles H. T. Crosthwaite, K.C.S.I., who was succeeded by Sir Charles B. Pritchard, K.C.I.E., in November 1892. Mr. F. L. O'Callaghan took up the post of Public Works Secretary, in succession to Colonel J. G. Forbes, on the 8th August of the same year. PUBLIC WORKS. General.

The engineer establishment of the Department, including Bombay and Madras, but excluding the now separate Military Works Department, was maintained at an average strength of 887.

The following statement shows the composition of the engineer establishment, as it stood at the commencement of the year 1892 :—

| | Government of India List. | Government of Madras List. | Government of Bombay List. | TOTAL. |
|---|---|---|---|---|
| Royal Engineer officers - - - | 67 | 15 | 8 | 90 |
| Other military officers - - - | 13 | — | — | 13 |
| *Civil Engineers :* | | | | |
| Appointed from Europe - - | 364 | 57 | 52 | 473 |
| Europeans appointed in India - | 205 | 4 | 6 | 215 |
| Natives appointed in India - - | 65 | 7 | 24 | 96 |
| TOTAL - - - | 714 | 83 | 90 | 887 |

In accordance with the recommendations of the Public Service Commission, important changes were effected during the year in the constitution of the Engineer and Accounts Establishments of the Public Works Department. The Engineering branch of the Department has been divided into two services, Imperial and Provincial, the former of which will be recruited in England and the latter in India. The pay, and leave and pension rules, of the two services will be different, but in other respects there will be no distinction between the members of the two divisions, and the highest posts in the Department will be open to both. The recruiting of the Imperial Service will be, as formerly, from the Royal Indian Engineering College at Cooper's Hill ; the Provincial Service will draw its recruits from Students of the Indian Colleges who are natives of India, and from upper subordinates of the Public Works Department.

The recruitment of the Accounts branch of the Department will, in future, be wholly in India. In respect of entrance examination and scale of salaries this branch of the Public Works Department has been assimilated to the enrolled list of the Finance Department.

The operations of the Department deal with three kinds of works, viz., Railways, Irrigation, and Buildings and Roads. The Railway Department is an Imperial service under the direct control of the Government of India ; the establishment employed on Irrigation and on Buildings and Roads, is subdivided into different Provincial services, controlled by the local administrations subordinate to the Supreme Government. Under the head of Buildings and Roads are included many miscellaneous works, such as improvements in towns, paving, water-supply and drainage, harbours, lighthouses, &c.

The annual expenditure on public works is met partly from money raised by loan, and partly from the ordinary revenues of the year. For the railways and the more important irrigation systems, distinct capital and revenue accounts are kept, but for the smaller works of irrigation, and

Public Works.

most of the works included in the class of buildings and roads, such accounts are not kept, though a distinction is made in the accounts between expenditure on new works and expenditure on repairs to existing works.

The following statement of the total receipts and expenditure under the head of Public Works for 1892–93 is compiled from the Finance and Revenue Accounts of the year :—

Receipts.

| | Rx. |
|---|---|
| Railways | 19,077,103 |
| Irrigation | 2,418,902 |
| Buildings and Roads | 653,188 |
| | 22,149,193 |

Expenditure (exclusive of Rx. 458,060 charged under Special Defence Works).

| | Charged to Revenue. | Not Charged to Revenue. |
|---|---|---|
| *Railways :* | Rx. | Rx. |
| Construction | 1,323,956 | 3,455,199 |
| On Revenue Account | 20,924,155 | — |
| *Irrigation :* | | |
| Construction | 106,403 | 531,091 |
| Ditto - from Famine Relief Grant | 60,793 | — |
| On Revenue Account | 2,834,076 | — |
| *Buildings and Roads :* | | |
| Military Works | 1,196,799 | — |
| Civil Work | 4,649,681 | — |
| Total | 31,095,863 | 3,986,290 |

The expenditure charged against revenue includes the following items of "Interest on Debt :"—

| | Rx. |
|---|---|
| Railways | 4,779,107 |
| Irrigation | 1,138,386 |

On the 31st of March 1893 Rx. 110,608,826 of permanent public debt had been incurred on account of railways, and Rx. 28,923,097 on account of irrigation.

## RAILWAYS.

Railways. Classification.

A full account of the results of railway operations in India is given in the Railway Administration Report annually presented to Parliament, and the aim of the following section is merely to give a short summary of them. As the accounts of the several railways had not been finally closed when the following statistics for the year 1893 were prepared, the figures must be accepted as only approximately correct.

The railways of India are classified primarily with reference to their ownership, and may be broadly divided into the Guaranteed, the State, and the Assisted. In the early days of railway enterprise the agency of private companies guaranteed by the State was exclusively employed, and nearly all the great trunk lines were made under this system. The chief terms of the contract between the old guaranteed companies and the State were as follows : the Government gave the land required free of charge ; it also guaranteed interest, generally at the rate of 5 per cent., on the share capital raised with its consent, and a lower rate upon debenture capital. A general control and supervision over the proceedings of the company was also retained, and Government stores and troops were to be carried on favourable terms.

If

If the net profits in any half-year fall below the amount of guaranteed interest the Government makes up the deficiency. If they exceed this amount the surplus is equally divided between the Government and the company. Moreover, the Government has the right of buying the undertaking at specified dates, on payment of the value of the stock calculated at its market price on the average of the three preceding years. In this way the East Indian Railway was acquired in 1880, the Eastern Bengal Railway in 1884, the Scinde, Punjab, and Delhi Company's lines in 1885-86, the Oude and Rohilkhand Railway at the end of 1888, and the South Indian Railway in 1890. In 1870 a new policy of railway development by the direct agency of the State was inaugurated; and in 1880-81 the system of encouraging private enterprise by State assistance was again resorted to. Both agencies are now employed side by side. The experience gained of the working of the old guarantee system has, however, suggested various modifications in the relations between the State and the companies which have more recently been formed for the construction and working of railways, and the nature of the assistance granted now varies considerably. In some instances, of which the Bengal and North-Western Railway is the most important, lines have been constructed without any direct pecuniary assistance; in others a subsidy or limited guarantee has been granted. The agency of private companies has also been employed by the Government both in the construction and working of State lines. In all cases the Government has the power of taking over the railway at specified periods on stated terms.

Financial results to the State.

The following figures, taken from the Finance and Revenue Accounts of 1892-93, show the financial result of the working of the railways in India for the year ending 31st March 1893.

| | Imperial. | Provincial. | England, including exchange. | Total. |
|---|---|---|---|---|
| **REVENUE.** | | | | |
| Railways:— | *Rx.* | *Rx.* | *Rx.* | *Rx.* |
| State railways (gross traffic receipts) | 14,810,148 | 1,004,291 | 368 | 15,814,807 |
| Guaranteed companies (net traffic receipts) | 3,244,413 | - - | - - | 3,244,413 |
| Subsidized companies (repayment of advances of interest) | 17,883 | - - | - - | 17,883 |
| TOTAL | 18,072,444 | 1,004,291 | 368 | 19,077,103 |
| **EXPENDITURE.** | | | | |
| Railways Revenue Account:— | | | | |
| State Railways:— | | | | |
| Working expenses | 7,579,288 | 365,580 | - - | 7,944,868 |
| Interest on debt | 2,939,735 | 210,372 | 1,629,000 | 4,779,107 |
| Annuities in purchase of railways | - - | - - | 2,717,399 | 2,717,399 |
| Interest on capital deposited by companies | 30,108 | - - | 1,056,033 | 1,086,141 |
| Interest chargeable against companies on advances | - - | - - | 328,492 | 328,492 |
| Guaranteed Companies:— | | | | |
| Surplus profits, land and supervision | 611,347 | - - | - - | 611,347 |
| Interest | 2,673 | - - | 3,435,962 | 3,438,635 |
| Subsidized Companies:— | | | | |
| Land, &c. | 12,383 | 16,643 | - | 29,026 |
| Miscellaneous railway expenditure | —10,860 | - - | - - | —10,860 |
| TOTAL | 11,164,674 | 592,595 | 9,166,886 | 20,924,155 |

In the figures for expenditure are included all charges falling on the Government for management and working expenses of railways, for interest on

RAILWAYS.

on their capital outlay, as well as for the gradual redemption (by charge to the revenue account) of the commuted capital of the East Indian, Eastern Bengal, and Sind, Punjab and Delhi railways, through the agency of sinking funds and annuities, and of that portion of the Oudh and Rohilkhand railway debt incurred in excess of the money raised through the agency of the "Discount" sinking fund; the figures also include charges for land and control required by the companies, and for miscellaneous items, such as head-quarters establishment and surveys. After meeting all these expenses, the total charge to the State in 1892–93 was Rx. 1,847,052.

General results of the working of railways.

The general results of the working of the various classes of railways during 1893 are given in the following table. The aggregate net earnings by all Indian railways* amounted to 5·44 per cent. on the total capital outlay on open lines, including steam-boat service and suspense items, but excluding other indirect charges. The net earnings of the previous year were 5·47† per cent.

*Railway Statistics*, 1893.

| CLASS. | Length of Line open on the 31st December 1893. | Total Capital outlay on open Lines to the 31st December 1893, including Steam-boat and Suspense. | Total number of Passengers carried. | Total weight of Goods carried. | Gross Earnings, including Steam-boat service. | Working expenses, including Steam-boat service. | Net Earnings, including Steam-boat service. | Percentage of Net Earnings on Capital outlay on open Line. |
|---|---|---|---|---|---|---|---|---|
| STANDARD GAUGE. | *Miles.* | *Rx.* | *No.* | *Tons.* | *Rx.* | *Rx.* | *Rx.* | |
| State lines worked by companies | 3,494·58 | 59,054,941 | 19,966,829 | 7,109,876 | 6,114,770 | 1,965,633 | 4,149,137 | — |
| State lines worked by the State | 3,781·30 | 62,614,455 | 25,794,694 | 7,394,968 | 4,610,927 | 2,668,556 | 1,942,371 | — |
| Lines worked by guaranteed companies | 2,586·90 | 49,503,694 | 37,648,279 | 5,426,093 | 6,390,161 | 3,098,152 | 3,292,008 | — |
| Assisted companies | 183·75 | 1,665,488 | 2,074,288 | 155,874 | 147,731 | 66,502 | 81,228 | — |
| Lines owned by native states and worked by companies | 400·58 | 4,659,235 | 1,802,689 | 455,790 | 343,266 | 178,310 | 164,956 | — |
| Lines owned by native states and worked by State railway agency. | 123·86 | 769,200 | 801,885 | 130,179 | 65,400 | 35,200 | 30,200 | — |
| TOTAL | 10,570·97 | 178,267,013 | 88,088,664 | 20,672,780 | 17,672,255 | 8,012,353 | 9,659,900 | 5·42 |
| TOTAL for 1892† | 10,196·59 | 172,226,413 | 83,577,278 | 19,018,611 | 17,329,827 | 7,901,419 | 9,428,407 | 5·47 |
| METRE GAUGE. | | | | | | | | |
| State lines worked by companies | 5,237·50 | 38,728,257 | 32,619,920 | 5,258,085 | 4,420,980 | 2,176,370 | 2,244,610 | — |
| State lines worked by the State | 1,294·75 | 10,979,695 | 9,946,600 | 1,391,100 | 1,162,400 | 669,950 | 492,450 | — |
| Assisted companies‡ | 136·21 | 953,785 | 589,807 | 276,056 | 98,074 | 61,349 | 36,725 | — |
| Lines owned by native states and worked by companies. | 121·70 | 542,981 | 828,786 | 147,080 | 43,097 | 19,947 | 23,150 | — |
| Lines owned and worked by native states | 739·48 | 2,625,196 | 2,395,116 | 342,610 | 304,279 | 158,357 | 145,922 | — |
| TOTAL | 7,529·64 | 53,829,914 | 46,380,229 | 7,414,931 | 6,028,830 | 3,085,973 | 2,942,857 | 5·47 |
| TOTAL for 1892† | 7,268·26 | 52,434,217 | 42,857,331 | 7,117,544 | 5,730,261 | 2,886,102 | 2,844,158 | 5·42 |
| SPECIAL GAUGES. | | | | | | | | |
| State lines worked by the State | 28·00 | 79,878 | 52,000 | 9,900 | 7,017 | 5,519 | 1,498 | — |
| Assisted companies | 51·00 | 317,000 | 51,537 | 28,063 | 63,135 | 35,451 | 27,683 | — |
| Lines owned by native states and worked by companies. | 71·66 | 185,540 | 447,900 | 51,400 | 24,540 | 12,100 | 12,440 | — |
| Lines owned by native states and worked by State railway agency.§ | — | — | — | — | — | — | — | — |
| Lines owned and worked by native states | 94·00 | 216,150 | 269,000 | 23,620 | 32,000 | 17,350 | 14,650 | — |
| TOTAL | 244·66 | 798,568 | 820,437 | 112,983 | 126,692 | 70,420 | 56,271 | 7·05 |
| TOTAL of 1892† | 244·86 | 781,579 | 796,305 | 123,885 | 127,455 | 73,391 | 54,064 | 6·92 |
| TOTAL of all railways | 18,345·27‖ | 232,895,495 | 135,289,330 | 28,200,694 | 23,827,777 | 11,168,746 | 12,659,028 | 5·44 |
| TOTAL of all railways for 1892† | 17,709·71‖ | 225,442,209 | 127,230,914 | 26,260,040 | 23,187,543 | 10,860,913 | 12,326,630 | 5·47 |

* Excepting the Bengal Doars, Cooch Behar, West of India, Portuguese, and Pondicherry railways.
† As corrected from later information.
‡ Excludes the Bengal Doars railway, the figures for which have not been reported.
§ Information for the Cooch Behar railway, which belongs to this class, has not been furnished.
‖ Excludes the mileage of railways constructed but not worked.

It

It will be observed that, with an increase of 635½* miles or 3·59 per cent. in the open mileage as compared with 1892, the gross earnings and working expenses show increases of Rx. 640,237, or 2·76 per cent., and of Rx. 307,836, or 2·83 per cent. respectively, resulting in an increase of Rx. 332,401, or 2·70 per cent. in the net earnings. RAILWAYS.

The total number of passengers carried and the tonnage of goods moved were more by 8,058,416 and 1,940,654 tons respectively than in 1892.

The total railway mileage, under each gauge, opened during the year, and the sections opened were as follows :—

| | Miles. | Miles. |
|---|---|---|
| STANDARD GAUGE. | | |
| East Indian—Mile 1 from Barákar to Chanch | 3 | |
| Bengal-Nagpur—Jhársuguda to Sambalpur | 30¼ | |
| Godhra-Rutlam—Godhra to Limkhera | 25 | |
| Oudh and Rohilkhand (State)—Lucknow to Rae Bareli | 48½ | |
| East Coast (State)—Bezwada to Godávari, south, opposite Rajahmundry 91 | | |
| Rajahmundry, Godávari north, to Vizianagram 163 | | |
| Sámalkôt to Cocanada 9¾ | | |
| Waltair to Vizagapatam 1¾ | | |
| | 265½ | |
| | | 372¼ |
| METRE GAUGE. | | |
| Rohilkhand and Kumaon (Lucknow-Bareilly section) Mailáni to Sohela river | 23½ | |
| Guntakal-Mysore frontier—Dharmavaram to Mysore frontier | 56½ | |
| Southern Mahratta (Mysore section)—Dodballapur to Mysore frontier | 31½ | |
| Pálanpur-Deesa—Pálanpur to Deesa | 17½ | |
| Burma (State)—Meiktila-road to Meiktila cantonment | 13 | |
| Bengal Dooars—Teesta Ghát, opposite Jalpaiguri, to Mal bazar 27 | | |
| Latiguri to Ramshai Hat 7¾ | | |
| | 34¾ | |
| Jodhpore-Bickaneer (Jodhpore section)—Merta-road to Kuchaman-road | 73 | |
| Jetalsar Rájkot—Jetalsar to Rájkot | 46¼ | |
| | | 296 |
| SPECIAL GAUGE. | | |
| Cooch Behar—Gitalda to Torsa river | | 24 |
| TOTAL | | 692¼ |

The additional lengths sanctioned for construction were :—

| | | |
|---|---|---|
| STANDARD GAUGE. | | |
| East Indian—Sultangunge to Sultangunge Ghát | | 1 |
| METRE GAUGE. | | |
| Rohilkhand and Kumaon (Lucknow-Bareilly section)—Dudwa to Sonaripur | 4½ | |
| Rájkot-Jamnagar—Rájkot to Jamnagar with branch to Port Jodia | 70† | |
| Oodeypore Chitor—Oodeypore to Chitor | 60½ | |
| | | 135 |
| TOTAL | | 136 |

* Excludes the mileage of the Bengal Dooars and Cooch Behar railways. The difference between this figure *plus* the mileage of the Bengal Dooars and Cooch Behar railways, and the total length shown, in the statement following, as having been opened during 1893, is due to minor corrections in the mileage of existing railways.

† Construction provisionally sanctioned pending result of preliminary survey.

RAILWAYS.

The total mileage under construction or sanctioned for commencement at the close of the year, *i.e.*, on the 31st December 1893, was as follows :—

| | Miles. | Miles. |
|---|---|---|
| STANDARD GAUGE. | | |
| State lines worked by companies | 157 | |
| State lines worked by the State | 584¼ | |
| Lines owned by native states and worked by companies | 10 | |
| Lines owned and worked by native states | 186¾ | 938 |
| METRE GAUGE. | | |
| State lines worked by companies | 803 | |
| State lines worked by the State | 156¼ | |
| Assisted companies | 20¾ | |
| Lines owned and worked by native states | 130½ | 1,110½ |
| TOTAL | | 2,048½ |

The extension of the Barákar branch of the East Indian railway to the Jherriah coal-fields, which includes a bridge over the Barákar river, is approaching completion and will probably be opened to traffic in March 1894 ; work is also well advanced on the Toposi Colliery branch.

A flotilla for service on the Bhagirathi river between Azímganj and Jeaganj in connection with the Azímganj branch, was under construction during the year.

Automatic vacuum brakes were brought into use on the mail trains of the East Indian railway, and an accelerated mail service was introduced. Pintsch's system of lighting carriages with gas was also adopted on the mail trains.

On the Bengal-Nágpur railway, arrangements were in progress for the construction of a bridge of boats across the Mahanuddee river at Sambalpur.

Work was started on the Silchar-Assam section of the Assam-Bengal railway and on the Mohuyin-Mogaung section of the Mu Valley (State) railway.

Work was actively prosecuted on the Mushkaf-Bolán railway, on the Chittagong-Silchar and Lumding-Gauhati sections of the Assam-Bengal railway, and on the Nílgiri railway.

At the close of 1893, work was approaching completion on the Limkhera-Dohad section of the Godhra-Rutlam railway, on the Bareilly-Rampur-Moradabad section of the Oudh and Rohilkhand (State) railway, and on the Mysore gold-fields and Máyavaram-Mutupet railways.

The work of strengthening the weak bridges on the North-Western (State) railway was also pushed forward. The work in connection with the strengthening of the Ravi bridge was completed, and the bridge was re-opened for traffic in July 1893. The erection of the new girders of the Jhelum bridge was proceeded with.

A colliery was opened in the neighbourhood of Sharigh on the Sind-Pishin section, and work in connection with the opening of another colliery at Bhaganwala was nearly completed during the year.

Heavy re-construction works, necessitated by flood damages on the Dinagepore branch of the Eastern Bengal (State) railway, were carried out during the year.

The doubling of the line between Tolly's Nullah and Dock junction on the southern section was completed, and the second line was opened on the 20th November 1893.

Owing to financial reasons, all works on the Langar division of the Mári-Attock railway had to be stopped in June 1893, but work is still in progress on the Kamalpur division.

From

RAILWAYS.

From the 1st April 1893 the gradient improvement works on the North-Western (State) railway between Jhelum and Ráwalpindi were amalgamated with the Mári-Attock railway as a separate charge. About eight miles of line with improved grades were completed and brought into use during the year. Work was also well advanced on those portions which are still under construction.

On the Great Indian Peninsula railway, the new junction station at Poona was completed during the year at a cost of Rx. 63,800.

The wagon ferry of the Bengal and North-Western Railway was transferred from Dígha Ghât to Mokameh Ghât and commenced working on the 7th February 1893.

On the 1st January 1893, the Guntakal-Dharmavaram section, and on the 23rd April 1893, the Dharmavaram-Mysore frontier section of the South Indian Railway were transferred to the Southern Mahratta Railway Company for working.

The Mysore Railway from Bangalore was linked in with the Guntakal-Mysore Frontier Railway on the 15th April 1893, and trains have been working through since the 17th September 1893.

The first section of the East Coast (State) Railway from Bezwada to the south bank of the Godávari River opposite Rajahmundry, 91 miles, was completed and opened for traffic on the 20th February 1893, and made over to the Nizam's Guaranteed State Railways Company, for working as a temporary measure. From the 1st January 1894, however, the section has been worked by State agency along with the Rajahmundry-Vizianagram section of the main line, and the Cocanada and Vizagapatam branches, which were completed and opened for public traffic on the 21st August 1893.

The bridge over the Kistna river at Bezwada, which has been constructed to carry a mixed standard and metre gauge line, was completed and formally opened on the 17th March 1893. This bridge connects the Southern Mahratta metre gauge railway system with the Nizam's Guaranteed State Railway and the East Coast (State) Railways, which are on the standard gauge. Metre gauge traffic from the Southern Mahratta Railway has been worked over the bridge from the 1st January 1894.

The project for bridging the Godávari River near Rajahmundry has been deferred, but a ferry has been established across the river, which will be capable of carrying loaded wagons.

The maintenance of the Myohaung-Wuntho section of the Mu Valley (State) Railway, together with all capital works in progress, was taken over by the Burma (State) Railway on the 1st July 1893.

A conference of railway delegates was held at Simla in September and October 1893, at which all the principal railways were represented. There were a large number of subjects under discussion bearing more or less on technical questions affecting the traffic and working of lines.

*Guaranteed Railways.*

The transactions of the guaranteed lines are illustrated by the following table. In this table the rupee is converted into sterling at contract rates :—

| RAILWAY COMPANY. | Capital expended to 31st December 1893. | Net Revenue for Year ended 31st December 1893. | Guaranteed Interest for Year ended 31st December 1893. | Interest in Excess of Revenue. | Net Revenue in Excess of Interest. | Surplus Profits earned by Company during Half-year. | | REMARKS. |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Ended 30th June 1893. | Ended 31st December 1893. | |
| | £. | £. | £. | £. | £. | £. | £. | |
| Great Indian Peninsula | 25,450,053 | 1,677,508 | 1,205,554 | — | 471,954 | 538,134 | — | |
| Bombay Baroda, and Central India. | 8,882,500* | 854,333 | 417,766 | — | 436,567 | 366,448 | 70,119 | * Includes the State outlay on the Pátri branch, 74,104*l*. |
| Madras - - - - | 11,045,833 | 485,833 | 533,737 | 47,904 | — | — | — | |
| TOTAL - - | 45,378,386 | 3,017,674 | 2,157,057 | — | 860,617 | 904,582 | 70,119 | |
| | | | | | | 974,701 | | |
| TOTAL FOR 1892† - | 45,238,164 | 2,943,137 | 2,147,280 | — | 795,857 | 1,021,422 | | † As corrected from latter information. |

## IRRIGATION.

IRRIGATION.

Unlike the branch of public works dealt with in the preceding section, the history of irrigation in India stretches back into remote antiquity, and many of the irrigation systems now administered by the officers of the Public Works Department are founded on the lines of old native works which have been restored and extended or re-modelled.

The class of works dealt with by the Public Works Department under the head of irrigation may be roughly divided into canals and tanks, though these two kinds of works are frequently used in combination.

The storage of water in tanks for the purpose of irrigation is very common in Southern India. The works are for the most part of native origin; but much has been done under the British Government in repairing and improving old tanks, and in constructing new works, in Madras, the Bombay Deccan, and in Ajmere-Merwara.

Canal irrigation, in which the water is drawn directly from a river, has been practised on the largest scale and with the most successful results in the North-Western Provinces, the Punjab, and the deltas of the large rivers in the Madras Presidency. Irrigation canals are of two descriptions—viz., "perennial" and "inundation." The former are furnished with permanent headworks and weirs, and are capable of irrigating large tracts of country throughout the year, independently of the local rainfall. The magnitude of some of the works of this class, which are almost entirely due to British enterprise and skill, may be judged by a few instances. The Ganges Canal, which has been in operation since 1854, and has cost Rx. 2,881,816, comprises 438 miles of main canal, and 3,721 miles of distributaries, and in the year under review supplied water to 722,478 acres. The Sirhind Canal in the Punjab, which has not long been opened, has cost upwards of Rx. 3,755,000, and consists of 542 miles of main channels, and 4,659 miles of distributaries. In Madras the great deltaic irrigation systems of the Godaveri, Kistna, and Cauvery have respective lengths of main channel of 503, 329, and 844 miles, and together irrigate upwards of 2,000,000 acres. The inundation canals, which are peculiar to the Punjab and Sind, are of a much simpler and less costly description than the perennial canals. They are for the most part simply earthen channels, made without the expensive machinery of masonry dams and sluices, and are supplied with water by the annual rise in May of the Indus and its affluents. They constitute a very useful class of irrigation works, and in some cases have produced most successful financial results.

The works to which the preceding paragraph applies, in most cases take off from the larger rivers, which, even in times of drought can be depended upon for an unfailing supply of water. There is, however, a large class of works, chiefly tanks, in which the supply of water is more or less dependent on the local rainfall, either directly or through the medium of the smaller rivers which dry up in hot seasons. There remains the method of irrigation more extensively used in India than any other—viz., that by wells, which however, does not come directly within the scope of operations of the Public Works Department.

Financially considered, the irrigation works are classed as "Major" or "Minor." The former class includes all the works which have been undertaken from loan funds in the expectation that they would be sufficiently productive to cover the interest charges on the sums spent on their construction. It also includes the works classed as famine protective, which are constructed out of the annual grant for famine relief and insurance. The cost of constructing the "Minor" works, as well as the sums annually required for their working and maintenance, are met from the ordinary revenues, and for the greater part of this class of works distinct capital and revenue accounts are not kept.

The distinction implied in the words "Major" and "Minor" is not in complete correspondence with the facts, as there are some Minor Works which are of more importance than some Major Works. But, speaking generally, the "Major" class includes the works of the greatest engineering importance, which have been constructed, or, as in a few cases of old native works, almost entirely reconstructed by British officers.

The

The following statement gives a general view of the results obtained from working the canals for which full accounts are kept, for 1892–93 and the two previous years :—

| | Capital Outlay (Direct and Indirect) to End of Year. | Gross Receipts. | Working Expenses. | Net Receipts. | Percentage of Net Receipts on Capital Outlay. | Area Irrigated. |
|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | | Acres. |
| Major Works - - - | 30,250,617 | 2,268,054 | 880,694 | 1,387,360 | 4·59 | 7,065,598 |
| Minor Works - - - | 4,736,104 | 619,686 | 291,122 | 328,564 | 6·94 | 2,575,467 |
| TOTAL for 1892–93 - | 34,986,721 | 2,887,740 | 1,171,816 | 1,715,924 | 4·9 | 9,641,065 |
| TOTAL for 1891–92 - | 34,272,979 | 2,622,967 | 1,187,836 | 1,435,131 | 4·1 | 9,444,363 |
| TOTAL for 1890–91 - | 33,289,469 | 2,578,554 | 1,092,535 | 1,486,019 | 4·4 | 9,488,784 |

There are great differences in the financial success of the irrigation works in the various provinces. These are due to the various physical conditions of the country in regard to surface, soil, climate, and the absence or presence of large rivers with a permanent supply of water, as well as to the differences in the character and habits of the people in different districts. There are also considerable differences in the manner in which the irrigation revenue is assessed and collected, which have an important bearing on the financial success of the works. In Madras the bulk of the irrigation revenue is collected with, and on most of the works is consolidated with, the land revenue. In Bengal and Bombay the receipts of the Irrigation Department consist to a great extent of "occupiers'" rates, and are not supplemented by "owners'" rates, as in the North West provinces, nor, with a few exceptions, by a share of the land revenue. In Sind the revenue of the canals consists almost entirely of the share of the land revenue allotted to irrigation. Cultivation is dependent on the artificial supply of water, and the consolidated revenue from the irrigated lands is divided in the proportion of 90 per cent. to irrigation and 10 per cent. to land. In the North Western Provinces and Oudh, and in the Punjab, the direct water rates are assessed partly on the occupier and partly on the owner of the land, the bulk of the rates falling on the former, and the irrigation receipts are further increased by a not unimportant contribution from the land revenue.

The following table gives the mileage of the canals in operation in each province, with the area irrigated during the year, and the estimated values of the crops raised by means of irrigation from the works :—

| | Bengal. | North-West Provinces and Oudh. | Punjab. | Madras. | Bombay, including Sind. | Baluchistan. | Rajputana. | TOTAL. |
|---|---|---|---|---|---|---|---|---|
| *Major Works:* | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | | Miles. |
| Main Canals - - - | 748 | 1,426 | 1,335 | 2,005 | 1,134 | Nil. | Tank irrigation. | 6,648 |
| Distributaries - - - | 2,432 | 8,658 | 5,599 | 6,430 | 321 | Nil. | - ditto - | 23,440 |
| | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Area irrigated - - - | 662,930 | 1,663,393 | 1,720,872 | 2,396,520 | 621,883 | — | — | 7,065,598 |
| *Minor Works:* | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | | Miles. |
| Main Canals - - - | 834 | 20 | 2,699 | 1,475 | 1,925 | 4 | Tank irrigation. | 6,957 |
| Distributaries - - - | — | 564 | 656 | 1,172 | 340 | 38 | - ditto - | 2,770 |
| | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Area irrigated - - - | 3,560 | 138,891 | 1,128,459 | 449,481 | 808,263 | 10,483 | 36,330 | 2,575,467 |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Estimated value of crops raised by Major and Minor Works. | 2,230,000 | 6,717,757 | 8,262,989 | 7,768,270 | 394,777* | — | — | — |

* Exclusive of Sind.

IRRIGATION.

The following more detailed account of the irrigation operations of the year is given under the heads of the different provinces in which the works are situated.

Bengal.

Compared with the average of recent years, the report on irrigation operations in Bengal for 1892–93 shows improved results. Owing to the nature of the rainfall, the area irrigated, though above the average, fell short of the area recorded for 1891–92. On the other hand, the net revenue derived from the Major Works was the highest yet earned. On the Orissa Canals great improvement was shown in the collection of the revenue, and though the working expenses still exceed the receipts, the deficit was comparatively small. On the Sone Canal the area irrigated under long leases still shows a steady increase, and it is remarked, in connection with this fact, that the demand for water for rice cultivation is rapidly becoming independent of the rainfall.

The general results for 1892–93 of working all the irrigation and navigation systems for which full accounts are kept, are compared with the results of the five previous years in the following statement:—

| YEAR. | Capital Outlay to End of Year. | Receipts. | Expenditure. | Net Receipts. | Percentage of Net Receipts on Capital Outlay. | Area Irrigated. |
|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | | Acres. |
| 1887–88 | 7,061,459 | 174,151 | 190,973 | —16,822 | — | 494,968 |
| 1888–89 | 7,078,339 | 204,329 | 179,631 | 24,698 | 0·3 | 564,012 |
| 1889–90 | 7,134,353 | 208,847 | 171,205 | 37,642 | 0·5 | 553,934 |
| 1890–91 | 7,277,301 | 216,727 | 198,166 | 18,561 | 0·2 | 545,541 |
| 1891–92 | 7,362,773 | 220,171 | 187,294 | 32,877 | 0·4 | 742,346 |
| 1892–93 | 7,417,261 | 259,544 | 196,152 | 63,392 | 0·8 | 666,490 |

There are in Bengal four canal systems which are classed as Major Works. Three of these combine irrigation with navigation, and the fourth (Hidgellee Tidal Canal) is purely a navigation work.

The financial results obtained from the working of the Major and Minor Works from the year under review are shown in the following statement:—

| CANAL. | Capital Outlay to End of Year. | Net Receipts. | Percentage of Net Receipts on Capital Outlay. | Area Irrigated. |
|---|---|---|---|---|
| *Major Works:* | Rx. | Rx. | | Acres. |
| Orissa Canals | 2,553,271 | — 813 | — | 160,952 |
| Midnapore | 844,284 | 8,445 | 1·0 | 91,217 |
| Tidal Canal | 232,788 | 2,030 | ·8 | — |
| Sone Canals | 2,670,147 | 30,133 | 1·13 | 410,761 |
| Total Major Works | 6,300,490 | 39,795 | ·63 | 662,930 |
| *Minor Works:* | | | | |
| Calcutta and Eastern Canal | 535,784 | 22,793 | 4·2 | — |
| Orissa Coast Canal | 434,443 | — 1,471 | — | — |
| Sarun Project | 69,675 | — 1,250 | — | 3,560 |
| Total Minor Works | 1,039,902 | 20,072 | 1·9 | 3,560 |

The

The Calcutta and Eastern Canals, which are the most profitable of the canal works in Bengal, are navigation works designed to maintain communication between Calcutta and Eastern Bengal, through the Sunderbunds. The Orissa Coast Canal, also a navigation work, forms with the Hidgellee Tidal Canal, a complete line of communication between Calcutta and Orissa; and in the event of famine in the latter district would be very useful as a means of importing food.

Besides the Minor Works mentioned in the foregoing statement, there are three works of this class for which capital accounts are not kept—viz., the Nuddea rivers system, and the Eden and Madhuban Canals. The first-named, which comprises about 477 miles of channel, is used for navigation purposes only.

In the following statement the traffic on the canals in Bengal in 1892–93 is shown in comparison with the traffic results of the previous year. The Nuddea rivers are included in this statement:—

| YEAR. | Length of Canal open for Navigation. | Receipts. | Maintenance Charges. | Net Receipts. | Ton Mileage. * | Estimated Value of Cargoes. | Number of Passengers. |
|---|---|---|---|---|---|---|---|
| | Miles. | Rx. | Rx. | Rx. | Tons. | Rx. | No. |
| 1891–92 - - - | 1,150 | 114,258 | 68,853 | 45,405 | 52,460,556 | 14,350,985 | 506,408 |
| 1892–93 - - | 1,150 | 103,412 | 57,275 | 46,137 | 49,575,060 | 13,631,279 | 612,668 |

* Excludes Nuddea Rivers.

The total capital expenditure of the year on all the irrigation and navigation works amounted to Rx. 54,488, against Rx. 85,471 in the preceding year. The decrease is principally owing to the small expenditure on the Sone Canals and the Hidgellee Tidal Canal during the year under review.

The capital estimate of the former canals was closed in 1891, and on the Hidgellee Tidal Canal the works in connection with the remodelling scheme have been practically completed.

The greater part of the year's capital expenditure was as usual on the Orissa Canals. The extension of the distributary system of these canals, with the drainage and protective works in connection with them, is still in progress. It is expected that the new distributaries will be practically finished by the close of the present year.

North West Provinces and Oudh.

In the North West Provinces and Oudh the area under irrigation during the year was below the average, a result which must be ascribed chiefly to the abundant winter rainfall. The low supply of water in the Jumna in the early part of the Kharif season also affected the canals fed by that river.

The general results of the year's working are compared with those of the five previous years in the following statement:—

| YEAR. | Capital Outlay to End of Year. | Net Assessed Revenue. | Percentage of Net Revenue to Capital. | Area Irrigated. |
|---|---|---|---|---|
| | Rx. | Rx. | | Acres. |
| 1887–88 - - - - | 7,876,732 | 302,001 | 3·84 | 1,517,288 |
| 1888–89 - - - - | 7,998,365 | 310,435 | 3·88 | 1,604,753 |
| 1889–90 - - - - | 8,087,397 | 370,563 | 4·58 | 1,879,403 |
| 1890–91 - - - - | 8,135,747 | 413,703 | 5·08 | 2,014,114 |
| 1891–92 - - - - | 8,189,278 | 446,626 | 5·45 | 2,045,030 |
| 1892–93 - - - - | 8,230,083 | 380,495 | 4·62 | 1,799,846 |

IRRIGATION.

Excluding the Betwa Canal, which is a protective work, the Major Works earned a profit of 4·97 per cent. on their capital outlay. The individual returns from, and the areas irrigated by, the four works were as under:—

| CANAL. | Percentage of Net Assessed Revenue on Capital. | Area Irrigated. |
|---|---|---|
| | | Acres. |
| Upper Ganges - - - - | 6·55 | 722,478 |
| Lower Ganges - - - - | 2·86 | 584,009 |
| Agra - - - - - | 1·49 | 107,054 |
| Eastern Jumna - - - - | 21·62 | 227,430 |

The Betwa Canal, the only "protective" work, was worked at a loss of Rx. 4,135.

The net revenue from the Minor Works amounted to Rx. 10,238, which yielded a percentage of 3·5 on the capital outlay of Rx. 284,430.

The capital expenditure of the year, which amounted to Rx. 40,828, was incurred chiefly on the drainage of water-logged tracts, on the remodelling of distributaries, and on the permanent river training works at Narora. The expenditure was almost entirely confined to the major class of works.

Of the 1,402 miles of main and branch canals of the North West Provinces and Oude, 512 miles on the Ganges, Lower Ganges, and Agra Canals, are navigable.

The navigation operations on the irrigation canals are not profitable, though the deficit in the year under review is smaller than usual. The figures for the last three years are given in the following statement:—

| YEAR. | Excess of Working Expenses over Receipts. |
|---|---|
| | Rx. |
| 1890-91 - - - - - - | 1,078 |
| 1891-92 - - - - - - | 785 |
| 1892-93 - - - - - - | 421 |

Of the principal crops raised on irrigated land, the chief place is as usual held by wheat, of which there were 655,116 acres—a considerable decrease from the previous year's crop, owing to the heavy winter rains, which enabled many crops to be raised without the aid of canal water.

Of the Kharif crops, the area under rice was exceptionally large, and that of indigo abnormally small.

The total value of the crops raised with canal water is estimated at Rx. 6,717,757.

In addition to the area irrigated by the Canals under the direct control of the Irrigation Department, there were 106,506 acres irrigated during the year by the Tarái and Bhábar Canals under the Commissioner of Kumaon.

Punjab.

On taking a general view of the irrigation operations in the Punjab for 1892–93, the results appear satisfactory, although the abundant rainfall of the winter months, which enabled large crops to be raised without the aid of irrigation, has unfavourably affected the assessed returns from particular works, and notably in the cases of the Western Jumna and Sirhind Canals.

The

The general results of the year's operations for all works are shown in the following table in comparison with the records of the four previous years :—

| YEAR. | Capital Outlay to end of Year. | Area Irrigated.* | Assessed Revenue.* |
|---|---|---|---|
| | Rx. | Acres. | Rx. |
| 1888–89 | 6,080,938 | 2,614,130 | 650,424 |
| 1889–90 | 6,196,927 | 2,797,172 | 689,260 |
| 1890–91 | 6,435,818 | 2,842,658 | 751,491 |
| 1891–92 | 6,904,558 | 3,067,336 | 800,652 |
| 1892–93 | 7,182,298 | 2,849,331 | 728,373 |

* Includes Muzaffargarh Canals.

The above figures are exclusive of the Native States portion of the Sirhind Canal.

As might be expected from the nature of the winter season, the revenue assessed is below the average of the last four years. On the other hand the revenue actually collected during the year, which includes collections of rates assessed in the previous year, shows a considerable increase when compared with 1891–92 and 1890–91.

Taking the actual revenue collected, the following table compares the individual results obtained from all the works for which full accounts are kept.

| CANALS. | Length of | | Capital Outlay to end of Year. | Net Revenue collected in Year. | Percentage of Net Revenue on Capital Outlay. |
|---|---|---|---|---|---|
| | Main and Branch Channels. | Distributaries. | | | |
| Major Works : | Miles. | Miles. | Rx. | Rx. | |
| Perennial Canals : | | | | | |
| Swat River | 22 | 140 | 361,278 | 18,793 | 5·20 |
| Western Jumna | 278 | 928 | 1,134,415 | 65,081 | 5·74 |
| Bari Doab | 362 | 1,051 | 1,669,945 | 171,380 | 10·26 |
| Sirhind (British portion) | 319 | 2,719 | 2,379,223 | 173,068 | 7·27 |
| Chenab | 140 | 572 | 1,081,850 | — 6,127 | — |
| Inundation Canals : | | | | | |
| Lower Sohag and Para | 98 | 41 | 69,992 | — 905 | — |
| Sidhnai | 68 | 112 | 96,711 | 14,460 | 14·95 |
| Minor Works : | | | | | |
| Upper Sutlej | 219 | 127 | 64,124 | 10,373 | 16·18 |
| Lower Sutlej and Chenab | 797 | 19 | 11,010 | 19,725 | 179·16 |
| Indus | 734 | – | 70,763 | 2,610 | 3·69 |
| Shahpur | 120 | 57 | 13,686 | 3,863 | 28·23 |
| TOTAL | 3,157 | 5,766 | 6,953,001 | 47,23,24 | 6·79 |

IRRIGATION.

The area irrigated by the Native States Branches of the Sirhind Canal was only 134,273 acres as against 224,446 acres in 1891–92. In the Patiala State there was a profit of 2·84 per cent. on the capital expenditure, in Nabha State the profit amounted to only 0·87 per cent., and in Jhind there was a loss on the year's working.

The revenue from the Chenab Canal failed to cover the working expenses, but the prospects of this canal are nevertheless very encouraging. As this is the first year of working as a perennial canal no very useful comparison can be made with the working of previous years when it was an inundation canal. The irrigation showed an increase over any previous year of 100,000 acres, and 347,314 acres of Crown waste land were allotted to settlers, who, towards the end of the year, began to settle down in considerable numbers. The Secretary of State gave his sanction in 1892 to a large extension of this canal system, and the work has now been taken in hand.

The total capital expenditure on all works during the year was Rx. 277,739, in addition to Rx. 22,790 contributed by Native States. About 15½ lakhs was expended on the Chenab Canal, and nearly nine lakhs on the Sirsa Branch of the Western Jumna Canal, the construction of which was pushed on with vigour.

The returns of navigation receipts and charges on the Western Jumna and Sirhind Canals show a small profit, which is much below the average of previous years. This was due to a serious falling off in the raft traffic on the Western Jumna Canal. On the Sirhind Canal navigation was carried on at a loss.

Burma.

There is not much to record under the head of irrigation in Burma.

In Lower Burma the expenditure on irrigation and navigation amounted to Rx. 73,293, but the greater part of the outlay was incurred on river embank ments and drainage cuts.

In Upper Burma the expenditure amounted to Rx. 114,416. Very little actual construction was done during the year. Some of the smaller irrigation works commenced during 1891–92 as famine relief works were completed, and work was done on the Nyaungyan-Minhla tank and the Meiktila lake.

For the main part, however, attention was devoted to survey work, and the maintenance of existing irrigation works. Surveys were commenced for a canal to be known as the Mandalay Canal, taking off from the Madaya river, and for two canals in the Shwebo and Ye-u districts taking off from the Mu river.

Ajmere-Merwara.

In Ajmere-Merwara the season was marked by very heavy rainfall, which was the cause of an abundant rabi crop. The irrigation works in these districts consist entirely of tanks, dependent on the rainfall for their supply of water, and the revenue is derived partly from water-rates directly paid, and partly from a share in the land revenue, including a well assessment, credit being given to the tanks for their effect in raising the level of the water in the neighbouring wells.

The general results of the year's working are compared with those of the preceding year in the following table :—

| YEAR. | Capital Expenditure to end of Year. | Net Revenue. | Percentage of Net Revenue on Capital Outlay. | Area Irrigated or Protected. |
|---|---|---|---|---|
| | Rx. | Rx. | | Acres. |
| 1891–92 - - - - | 189,667 | —21,835 | — | 11,987 |
| 1892-93 - - - - | 226,846 | —6,860 | — | 36,330 |

The irrigation tanks in Ajmere-Merwara are all included in the class of Minor Works.

From

From an irrigation point of view the Madras Presidency is distinguished by the variety and extent of its works, ranging from the great deltaic systems of the Godaveri, Kistna, and Cauvery, to the small tanks and channels maintained by the Revenue Department.

There are at present 10 "Major" Works, and 23 "Minor" Works, for which Capital and Revenue Accounts are kept, and numerous other irrigation and agricultural works, individually small, for which such accounts are not kept. Of the 23 minor works for which full accounts are kept, 19 are irrigation systems, and 4 are tidal canals intended for purely navigation purposes.

Excluding the Periyar project, still under construction, there are now in actual operation 3,444 miles of canals, of which 980 miles are for irrigation and navigation, 2,160 miles for irrigation only, and 304 miles for navigation only. From the irrigation canals 6,759 miles of distributary channels are taken off. The area irrigated during the year was 2,847,201 acres, the crops grown being valued at Rx. 7,768,270, or Rx. 581,898 more than in the previous year. It is noticeable that the estimated value of all the crops irrigated by the major and the principal minor works exceeded the total capital cost of these systems. Of the irrigated crops, rice constituted 95 per cent.

Taking all the works for which full accounts are kept, the general results of the year's working will be seen from the following statement :—

| Year. | Capital Outlay. | Area Irrigated. | Net Revenue. | Percentage of Net Revenue on Capital. |
|---|---|---|---|---|
| | Rx. | Acres. | Rx. | |
| 1890-91 - - - - | 7,240,187 | 2,767,775 | 401,342 | 5·5 |
| 1891-92 - - - - | 7,562,781 | 2,792,589 | 342,980 | 4·5 |
| 1892-93 - - - - | 7,815,967 | 2,847,201 | 504,925 | 6·4 |

The net revenue recorded in the foregoing statement is that which has resulted from the outlay of Government capital. If the net revenue due to old irrigation be added, the total amount will be Rx. 863,690.

The results of the year's working for the Major Works in operation are shown by the following figures :—

| Work. | Area Irrigated | Capital Outlay. | Net Revenue. | Percentage of Net Revenue on Capital. |
|---|---|---|---|---|
| | Acres. | Rx. | Rx. | |
| Godaveri Delta - - - - | 697,388 | 1,280,427 | 175,795 | 13·73 |
| Kistna Delta - - - - | 471,401 | 1,079,510 | 135,278 | 12·53 |
| Pennér Anicut - - - - | 73,051 | 188,168 | 13,923 | 7·40 |
| Sangam Anicut - - - - | 74,987 | 369,235 | 11,594 | 3·14 |
| Kurnool-Cuddapah Canal - - | 30,766 | 2,166,584 | —2,100 | — |
| Barur Tank - - - - | 3,584 | 41,859 | 240 | ·57 |
| Cauvery Delta - - - | 1,012,649 | 177,945 | 69,399 | 39·00 |
| Srivaikuntham Anicut - - | 29,111 | 145,154 | 3,757 | 2·59 |
| Rushikulya (Protective Work) - | 4,183 | 324,525 | —995 | — |
| Total - - - | 2,396,520 | 5,773,407 | 406,891 | 7·05 |

IRRIGATION

The Minor Works irrigated an area of 450,681 acres, and earned a net revenue of Rx. 100,292, equivalent to a percentage of about 14·71 on the capital expended on them. The purely navigation works, of which the Buckingham Canal is the most important, were worked at a small loss. The total capital outlay on the last-named work amounts to Rx. 814,485. The financial results from this canal continue to show improvement.

Besides the works referred to in the foregoing paragraphs there is a large class of small works in Madras, partly maintained by the Public Works Department and partly by the Revenue Department, for which distinct capital and revenue accounts are not kept. The revenue derived from these works in 1892–93 was Rx. 782,892, and the area irrigated by them was 3,220,877 acres. A plan for the systematic repair of some of these works has now been in progress for some years, under the title of the "Tank Restoration Scheme." Up to the end of the year an expenditure of 43 lakhs had been incurred under this scheme, 26,874 square miles had been investigated, and estimates for 3,545 works had been prepared.

The only large works under construction in the Madras Presidency are the Periyar and Rushikulya Projects. The Periyar project is designed to conduct the waters of the Periyar river from the western to the eastern side of the Ghâts by a cutting and tunnel through the watershed. The capital expenditure on this work during the year was Rx. 134,837. It is estimated that the work will still take more than four years to complete. On the Rushikulya Project the capital expenditure was Rx. 50,806. This project is now well advanced, and a portion of the works has been opened for irrigation.

The total capital expenditure of the year on all works amounted to Rx. 253,186.

There is a considerable amount of navigation on the Godavari, Kistna, and Kurnool Irrigation Canals, in addition to that on the tidal canals, which are designed solely for traffic; and on the Godavari and Kistna the working was remunerative. Including the Buckingham Canal, the total value of goods carried during the year was Rx. 7,021,531, and the ton mileage was 45,505,422.

Bombay (excluding Sind).

The area under irrigation in Bombay in 1892–93 was very much smaller than in the preceding year, which, however, was an exceptionally good year. Owing to copious and seasonable rainfall the area irrigated sank from 96,025 acres in 1891–92 to 65,487 acres in the year under review, and there was a large decrease in the assessed revenue. The falling off in the area of irrigation was most perceptible in the class of protective works.

A comparative statement of the results from those works for which full accounts are kept for 1892–93, and the preceding four years, is given in the following table:—

| YEAR. | Capital Expenditure to End of Year. | Area Irrigated. | Revenue Realised. | Working Expenses. | Net Revenue. |
|---|---|---|---|---|---|
| | Rx. | Acres. | Rx. | Rx. | Rx. |
| 1888–89 - - - | 2,360,723 | 79,195 | 37,154 | 23,431 | 13,723 |
| 1889–90 - - - | 2,428,146 | 85,550 | 42,286 | 24,712 | 17,574 |
| 1890–91 - - - | 2,491,533 | 74,852 | 46,081 | 23,961 | 22,120 |
| 1891–92 - - - | 2,511,284 | 96,025 | 51,207 | 28,589 | 22,618 |
| 1892–93 - - - | 2,531,673 | 65,487 | 54,554 | 30,777 | 23,777 |

The net revenue realized for the year represents a return of 0·94 on the capital expenditure. The Major Works produced a net revenue equivalent to 1·22 per cent. on the capital of Rx. 1,799,258 expended on them. The class of Major Works contains no single work that can be compared in magnitude with the

the enormous canal systems of other provinces in which it has been possible to utilize the great perennial rivers for the purposes of irrigation. In Bombay, owing to the uncertainty of the supply in the rivers, irrigation is largely dependent on the storage of water, and the majority of the works which have been undertaken in the province are tank projects.

The most important work, judged by the amount of capital expenditure, is the Mutha Canal system with the Lake Fife Reservoir, which in 1892–93 irrigated an area of 6,797 acres, besides supplying the cantonment and civil station of Poona with water. The total expenditure on this work is Rx. 635,082, and in the year under review the net assessed revenue was equivalent to a return of 1·88 on the capital outlay. The most remunerative work in the "major" class was the Krishna Canal which yielded a return of net revenue equal to 2·84 per cent. on the capital cost of Rx. 85,799. For irrigating capacity, the works known as the Nira Canal and Bhatghar Reservoir are the most important in the province. These works, which are classed as protective, are estimated to cost Rx. 610,443 when complete, and they will command an irrigable area of 227,670 acres.

The capital outlay during the year on all works amounted to Rx. 20,389, which was incurred principally on the Nira and Mutha Canals.

In the minor class of works for which distinct Capital and Revenue accounts are not kept, the expenditure for the year amounted to Rx. 19,797, and the revenue realized was Rx. 54,491, giving a net revenue of Rx. 34,694. The area irrigated during the year by this class of works was 146,187 acres.

Sind.

In Sind the regular rise of the River Indus, on which the success of the Irrigation operations depends, was so long delayed, that at one time fears of scarcity were entertained. Water was not available for full supply in the canals until nearly six weeks later than usual, but after this the river fortunately rose to a good height which was maintained until the first week in September, and of which full advantage was taken. Numerous breaches occurred in the bunds, but only in the Western Nara district did much damage occur, the Pritchard canal and the railway suffering severely, and great damage being caused to cultivators and also to the railway by rainfloods from the hills to the west, which appeared for the first time for many years.

Taking the works for which full accounts are kept, the general results for 1892–93 and the three preceding years are shown in the following statement:—

| Year. | Capital Outlay to End of Year. | Net Revenue. | Percentage of Net Revenue on Capital Outlay. | Area Irrigated. |
|---|---|---|---|---|
| | Rx. | Rx. | | Acres. |
| 1889–90 - - - - | 1,183,638 | 147,413 | 12·4 | 1,381,679 |
| 1890–91 - - - - | 1,193,929 | 142,458 | 11·9 | 1,290,817 |
| 1891–92 - - - - | 1,207,503 | 120,058 | 9·9 | 1,225,150 |
| 1892–93 - - - - | 1,237,108 | 146,533 | 11·8 | 1,363,660 |

In Sind the existence of cultivation depends upon irrigation, and there is a constant demand for the canal water. This fact, and the comparatively inexpensive nature of inundation canals, will account for the favourable financial results obtained from the works.

There are four "major" works in Sind, viz , the Desert, Unharwah and Begari Canals, and the Eastern Nara Works. These works earned profits at the respective rates of 1·6, 8·8, 17·7, and 5·9, on the sums expended on their construction.

IRRIGATION.

The capital expended during the year on the major works, which amounted to Rx. 20,844, was almost entirely upon the Eastern Nara Works. On the minor works the capital expenditure was Rx. 8,760, and was incurred chiefly on the Fuleli Canal.

The principal works in hand on the Eastern Nara, were the Játri Keti clearance, and the construction of an escape sluice from the Nára into the Játri Dhands. The construction of the Dhámrao Canal, and a new feeder to the Western Nara were in progress, and improvements to the Unharwah were commenced. A new regulator for the Fuleli Canals was furnished, and another was in progress. In the Karachi district, work was started on the Báráhgaza Khadi bund.

Baluchistan.

There are no "major" works in Baluchistan. The class of "minor" works is represented by two schemes now in operation, viz., the Shebo Canal and the Khushdil Khan Reservoir, the former of which has cost Rx. 65,632, and the latter Rx. 89,678.

In the year under review the Shebo Canal earned a net revenue of Rx. 918, equivalent to a percentage of 1·40 on the capital outlay; the net revenue from the Khushdil Khan Reservoir was Rx. 1,299, equal to a return of 1·45 per cent. on the capital expended.

The area irrigated by these two works was 10·483 acres.

## BUILDINGS AND ROADS.

BUILDINGS AND ROADS.

The buildings and roads branch of the Public Works Department embraces all the operations of the Department which are not classed under the special heads of Railways and Irrigation. It includes the extension and maintenance of the road system, the construction and repair of all the buildings required for the proper discharge of the functions of government in all its branches, and a large miscellaneous class of works of public improvement, including light-houses, harbours, embankments, boat bridges, and ferries, and the water supply and sanitation of towns.

The operations of this branch of the Department are classed primarily under two divisions, viz., military and civil works. The military works are executed entirely from Imperial funds.

The expenditure on civil works is chiefly met from provincial and local resources. The classification of the expenditure for 1892–93 under the heads referred to is shown in the following table:—

| | Imperial. | Provincial. | Local. | Total in India. | Expenditure in England. | Exchange. | GRAND TOTAL. |
|---|---|---|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Military Works - - - | 1,131,728 | - - | - - | 1,131,728 | 40,628 | 24,443 | 1,196,799 |
| Civil Works - - - - | 635,087 | 2,162,357 | 1,714,593 | 4,512,037 | 85,940 | 51,704 | 4,649,681 |
| TOTAL, 1892-93 - - | 1,766,815 | 2,162,357 | 1,714,593 | 5,643,765 | 126,568 | 76,147 | 5,846,480 |
| TOTAL, 1891-92 - - | 1,938,845 | 2,461,115 | 1,651,761 | 6,051,721 | 109,485 | 47,546 | 6,208,752 |
| TOTAL, 1890-91 - - | 1,786,868 | 2,188,276 | 1,600,095 | 5,575,239 | 117,330 | 38,338 | 5,730,907 |

This statement does not include the outlay from Imperial revenues recorded under the head of Special Defence Works, which amounted to Rx. 491,837 in 1890–91, Rx. 604,848 in 1891–92, and Rx. 458,060 in 1892–93.

The greater part of the expenditure from local funds is absorbed by the maintenance and extension of roads. A portion of this expenditure is under the direct control of the Public Works Department, but the larger part of the local funds outlay under the head of Buildings and Roads, as well as a small portion of the provincial outlay, is under the management of the Civil Department, and is not controlled by the Public Works officers.

The

BUILDINGS AND ROADS.

The extension of local government in India has thrown a large portion of the smaller class of public works into the hands of the local boards. Speaking generally, the boards maintain their own establishments, but in the case of any works of unusual difficulty have recourse to the professional skill of the Public Works officers.

## MILITARY WORKS.

MILITARY WORKS.

The total expenditure on Military Works, ordinary and special, amounted to Rx. 1,654,086 in 1892-93, against Rx. 1,829,418 in 1891-92. The decrease of Rx. 175,332 was almost entirely under the head of Special Defence Works, the cost of which amounted to Rx. 457,287, against Rx. 614,900 in the previous year.

The expenditure of Rx. 1,196,799 on ordinary military works included an outlay of Rx. 506,733 on new works, of Rx. 315,087 on repairs, and of Rx. 255,748 on establishment. Under the head of New Works, additions to the barrack and hospital accommodation for British and native troops cost about Rx. 240,000, while General Cantonment Works figured at Rx. 114,261, the greater part of this sum being applied to the improvement of the water supply of the large military stations, a work of the highest importance to the health of the troops.

The expenditure of Rx. 457,287 on Special Defence Works was made up as follows:—

| | Rx. |
|---|---|
| Coast Defences | 148,985 |
| Frontier „ | 105,248 |
| Armaments | 156,583 |
| Establishment | 45,174 |
| Tools and Plant | 3,101 |
| Suspense | 1,804 |
| Total | 457,287 |

Of the expenditure under Armaments, no less than Rx. 149,167 was appropriated to Coast Defences, while only Rx. 7,416 was devoted to frontier works.

Inclusive of "Armaments," frontier defences cost Rx. 112,664, and coast defences Rx. 298,152. The largest outlay on the latter was at Bombay and Rangoon, smaller sums being expended on the works in progress on the Hooghly, at Aden, and Karachi.

The expenditure on land frontier defences was distributed over various points in the Punjab and Baluchistan, far the greater part of the work, however, being done at Rawalpindi and Attock.

Of the total expenditure on Special Defence Works, Rx. 255,723 was spent in India, and the balance of Rx. 201,564 was applied to the purchase of heavy guns, ammunition, and stores in England. The latter amount includes a sum of Rx. 3,984 contributed by the Imperial Government towards the defences of Aden.

The total amount expended on Special Defence Works up to the close of 1892-93 (exclusive of contributions from Imperial revenues) was Rx. 3,815.464.

## CIVIL WORKS.

CIVIL WORKS.

The following statement shows the distribution of the total outlay in India on Civil Works among the different provinces.

EXPENDITURE in India on CIVIL WORKS in 1892–93.

| | India, General and Political. | Bengal. | North West Provinces and Oudh. | Punjab. | Burma. | | Central Provinces. | Assam. | Madras. | Bombay. | TOTAL. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Upper. | Lower. | | | | | |
| *Expenditure by Public Works Department:* | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Civil Buildings | 69,616 | 139,929 | 131,580 | 144,377 | 105,128 | 119,361 | 64,200 | 24,154 | 122,344 | 163,393 | 1,084,082 |
| Communications | 65,820 | 84,109 | 235,546 | 173,242 | 93,700 | 105,077 | 84,813 | 182,972 | 49,331 | 203,972 | 1,278,582 |
| Miscellaneous Public Improvements. | 4,272 | 5,286 | 42,126 | 35,200 | 6,590 | 11,255 | 1,616 | 8,325 | 1,992 | 13,191 | 129,853 |
| TOTAL Works and Repairs | 139,708 | 229,324 | 409,252 | 352,819 | 205,418 | 235,693 | 150,629 | 215,451 | 173,667 | 380,556 | 2,492,517 |
| Establishment | 42,223 | 76,508 | 116,822 | 88,104 | 57,417 | 52,701 | 33,922 | 51,167 | 54,637 | 111,440 | 684,941 |
| Tools and Plant | 3,871 | 2,960 | 5,377 | 5,113 | 4,444 | 5,651 | 5,018 | 2,796 | 15,850 | 6,892 | 57,972 |
| * Profit and Loss, Suspense, &c. | — 7,015 | — 9,009 | — 9,460 | — 6,167 | — 1,353 | 21,374 | 87 | — 515 | — 5,879 | 2,780 | — 15,157 |
| TOTAL Expenditure by Public Works Department | 178,787 | 299,783 | 521,991 | 439,869 | 265,926 | 315,419 | 189,656 | 268,899 | 238,275 | 501,668 | 3,220,273 |
| *Expenditure by Civil Department* | 15,326 | 472,966 | 86,366 | 15,359 | 14,453 | 34,203 | 19,323 | 2,130 | 482,479 | 149,159 | 1,291,764 |
| TOTAL Expenditure in India | 194,113 | 772,749 | 608,357 | 455,228 | 280,379 | 349,622 | 208,979 | 271,029 | 720,754 | 650,827 | 4,512,037 |

* Under this head has been deducted a sum of Rx. 3,857 for outlay in England from Imperial funds and exchange thereon, and Rx. 778 for charges incurred on account of the Indo-European Telegraph Department by the Bombay Public Works Department.

BUILDINGS AND ROADS: CIVIL WORKS.

The greater part of the outlay by the Civil Department, shown in the foregoing statement, was expended upon communications. The following abstract shows the total sums expended in India, by both the Public Works Department and the Civil Department, under the three heads of Buildings, Roads, and Miscellaneous Public Improvements. As in the previous statement, Military Works are not included.

| | By Public Works Department. | By Civil Department. | TOTAL. |
|---|---|---|---|
| | Rx. | Rx. | Rx. |
| Civil Buildings | 1,084,082 | 103,008 | 1,187,090 |
| Communications | 1,278,582 | 813,596 | 2,092,178 |
| Miscellaneous Works | 129,853 | 144,197 | 274,050 |
| TOTAL Works and Repairs | 2,492,517 | 1,060,801 | 3,553,318 |
| Establishment | 684,941 | 177,354 | 862,295 |
| Tools and Plant | 57,972 | 9,140 | 67,112 |
| Profit and Loss, Suspense, &c. | — 15,157 | 44,469 | 29,312 |
| TOTAL | 3,220,273 | 1,291,764 | 4,512,037 |

The expenditure in England consists to a great extent of furlough and absentee pay and allowances of military and civil officers of the Public Works Department. It also includes the expenses of the Royal Indian Engineering College at Cooper's Hill, which amounted in 1892-93 to 28,184*l.* (inclusive of 560*l.*, the cost of alterations to the College buildings). The revenue of this institution for the year was 27,704*l.*

The total expenditure in Bengal amounted to Rx. 777,555, distributed as follows:— Bengal.

| | Rx. |
|---|---|
| Imperial Military | 4,806 |
| Imperial Civil Works | 27,390 |
| Provincial Civil Works | 290,513 |
| Local Civil Works | 454,846 |
| | Rx. 777,555 |

There were no Imperial works of importance carried out during the year.

In the class of provincial buildings the principal work was the new Public Offices in Dalhousie square, Calcutta, which were completed in November 1892. The building will accommodate the offices of the Commissioner of the Presidency Division, the Collector of Income Tax, and the Collector of Calcutta. A new School of Art was commenced in January 1892 and completed in January 1893, and the extension of the east wing of the Presidency College, with the view of establishing a chemical laboratory, was taken in hand. Improvements were carried out in the Medical College Hospital, and measures were taken for remedying the settlement that has taken place in the High Court building.

The total outlay on buildings amounted to Rx. 154,025, the largest individual item being the expenditure under the head of Land Revenue in the provision of courthouses, treasuries, &c. Progress was made during the year in the work of providing improved accommodation for Munsifs' Courts, and residences were erected for Government officials at various places where there was want of house accommodation.

The old Kanarak Temple was visited during the year, and will in future be maintained like other historical buildings, at the public expense.

Under the head of Communications, the most noticeable work was the Tulin Bridge over the Subarnarekha-river on the Ranchi-Purulia-road, which was finished and opened for traffic on the 4th September 1892; a completely

Buildings and Roads: Civil Works.

bridged and metalled road now connects Ranchi with the Purulia railway station. The Pancharai Bridge on the Darjeeling Hill Cart-road was opened for traffic, and the Ranchi-Chaibassa-road which forms an important railway feeder road to the Bengal Nagpur Railway was partly completed. Particular attention was given to the development of means of communication in the Duars, with the two-fold object of providing feeders to the Duars Railway and of opening up the eastern part of the district.

The following statement shows the length of road communication maintained by public authorities in Bengal during the year 1892-93.

| | Metalled Roads. | Unmetalled Roads. | Total. |
|---|---|---|---|
| | Miles. | Miles. | Miles. |
| Maintained by Public Works Department - | 1,095¼ | 479¾ | 1,574¾ |
| Maintained by Local Authorities - - - | 3,169 | 30,695¼ | 33,864¼ |
| Total - - - | 4,264¼ | 31,174¾ | 35,439 |

The total expenditure on road extension and maintenance during the year was Rx. 84,109 by the Public Works Department, and Rx. 339,270 by local officers.

The construction of the Tarkeshwar-Magra Steam Tramway was commenced during the year. This scheme has been promoted entirely under native auspices, and its construction is under native management. Projects for tramways from Howrah to Ampta, and from Howrah to Sheakhalla, were under consideration.

Mishaps arising from floods appear to have been confined to the Darjeeling district during the rainy season of 1892; several bridges were carried away, and there was considerable interruption of traffic.

The Kidderpore Docks were opened in September 1892. This work was originally estimated to cost two crores of rupees, but modifications of the design, and extra expenditure caused by a serious accident to the dock walls, and other causes, have raised the total outlay to Rx. 2,809,806.

North West Provinces and Oudh.

The expenditure for the year in the Building and Roads Branch in the North West Provinces and Oudh, was as follows:—

| | Rx. |
|---|---|
| Military Works - - - - - - - - | 1,492 |
| Civil Works, Imperial - - - - - - - | 13,743 |
| „ Provincial - - - - - - - | 352,303 |
| „ Local - - - - - - - - | 242,311 |
| Total - - - | Rx. 609,849 |

There were no buildings of importance under construction from Imperial Funds.

The most important works executed during the year from provincial and local funds were as follows: the additions to the Thomason Hospital at Agra were completed, the grounds laid out, and a water supply in connection with the city waterworks arranged for. The new buildings have cost Rx. 16,286, and were formally opened in October 1892. An expenditure of Rx. 8,002 was incurred upon the Bar Library and Barristers' and Pleaders' Chambers at Allahabad. This building is attached to the High Court, and supplies a long-felt want. The Ishwari Hospital at Benares was completed and opened during the year.

Two bridges over the Hindan river at Ghaziabad and Tikavi were completed in June 1892 at a total cost of Rx. 11,211, and Rx. 8,585, respectively.

The wire fence along the western border of the Agra district was extended southwards as far as the Ban or Utangan river, a distance of 23¼ miles. The whole length now protected against the incursions of wild cattle from Bhartpur territory is 41¼ miles. It has proved effective, and has conferred a great boon on the cultivators.

The

The total expenditure on communications, excluding establishment, amounted Rx. 112,385 from provincial and Rx. 160,275 from local funds. Progress was made with the important road from Hawalbagh to Baijnath, and the lower part is approaching completion. BUILDINGS AND ROADS: CIVIL WORKS.

An extension of the Fyzabad-Gorakhpur-road from Betwa to Kutra and Lakarmundi railway station was in hand, and improvements and repairs were carried out on the new cart road from the brewery to Naini Tal.

The establishment of the Thomason Engineering College cost Rx. 14,734, and the net profits from the Government workshops at Roorkee amounted to Rx. 9,633 against Rx. 8,320 in the previous year. The minor public works such as the less important roads, the local educational and medical buildings, dák bungalows, inspection and rest houses, and miscellaneous public improvements of a local nature, are carried out and maintained by the district boards, who, for these purposes, have a small trained establishment under their control. Among the public works of the Province, a prominent place must be given to the large schemes of water supply and sanitation which are being carried out by the municipalities of the larger towns. Works of this kind were in progress in Lucknow, Naini Tal, Mussoorie, Cawnpore, and Benares.

The Ganges navigation works which consist in keeping open a channel in the Ganges between the points where the Jumna and Gogra flow into it, were carried on as usual. The funds connected with the Ganges river works and tolls, showed an unexpended balance on 31st March 1892 of Rx. 4,062, and the ferry funds showed a surplus of Rx. 41,743.

The number of works of public utility constructed and repaired by private individuals at their own expense during the year was 244, at a cost of Rx. 11,243. They consisted chiefly of masonry wells, with a few tanks, bridges, and other works.

The total expenditure incurred in the Public Works Department of the Punjab amounted to Rx. 476,343. Of this amount, Rx. 21,115 was spent on Imperial military, Rx. 32,059 on Imperial civil works, Rx. 310,498 on provincial works, and Rx. 112,671 on local works. About 12¼ lakhs were expended by Municipal Committees, while works costing over 1½ lakhs, paid for from private and other funds, were carried out by the Provincial Public Works Department. PUNJAB.

The most important Imperial works in hand were a combined water supply and sewage scheme at Kohát (the sewage part of which has been completed), and the metalling, repairing, and providing water supply for the North West Frontier-road and the Dera Gházi Khan-Loralai-road. Among civil works it may be mentioned that the new additional Court-house at Delhi, the new Jail at Abbottabad, and a new Anatomical Laboratory for the Mayo Hospital at Lahore, were completed during the year, and good progress was made with the Montgomery Central Jail. The most important contribution works were the Dufferin Hospital at Delhi, which was completed, and the Jubilee Museum at Lahore, which was practically finished, with the exception of some ornamentation work.

The Delhi Waterworks were formally opened in October 1892, and progress was made with the Simla water supply and sewage extension works, and with the Ludhiána City Drainage and the Murree and Dalhousie water supply scheme.

The following statement gives the number of miles of road in the province at the close of the year, excluding station roads:—

| | Metalled. | Unmetalled. | Total. |
|---|---|---|---|
| | Miles. | Miles. | Miles |
| Imperial | 232½ | 510 | 742½ |
| Provincial | 1,530½ | 2,813¾ | 4,343¾ |
| District | 745½ | 20,430½ | 21,176 |
| Total | 2,508½ | 23,753¾ | 26,262¼ |

BUILDINGS AND ROADS: CIVIL WORKS.

Of the total road mileage, 3,169¼ miles were maintained under the direct management of the Public Works officers; the remainder were almost entirely maintained by the District Fund Establishment.

Boat bridges are maintained at various points on the large rivers by which the province is traversed. The capital outlay on boat bridges and major ferries, amounted at the close of the year to Rx. 54,786. The gross income derived from them during the year was Rx. 13,689, and the cost of maintenance was Rx. 12,042, leaving a net income of Rx. 1,647.

The total cost of the Imperial and Provincial Public Works establishment employed in the Punjab in 1892–93 amounted to Rx. 82,225. The percentage of cost of establishment to expenditure on works and repairs was 22·9. Besides the works carried out by the Public Works Department, of which the cost is met from Imperial and provincial funds, much professional assistance is rendered by the Department to the district boards and municipalities in checking and examining estimates and plans, in preparing projects, in inspection, and in some cases in carrying out works.

Burma.

The expenditure in the two divisions of Burma for the year 1892–93 is shown in the following statement:—

| | Upper Burma. | Lower Burma. |
|---|---|---|
| | Rx. | Rx. |
| Imperial Military | 135,308 | 14,397 |
| Imperial Civil | 260,876 | 2,864 |
| Provincial | — | 296,458 |
| Local | 19,503 | 50,300 |
| TOTAL Rx. | 415,687 | 364,019 |

In Lower Burma the principal buildings under construction were the New Public Offices, Rangoon, which were nearly completed; the Jail at Insein for 2,000 prisoners, which was partly occupied, and the New Government House, Rangoon. The expenditure during the year on the last-named work was Rx. 14,984. The building is estimated to cost Rx. 58,582.

The total mileage of open roads in Lower Burma is now 2,697¾. Twelve miles of metalled, and 18 miles of unmetalled raised and bridged roads were opened during the year.

In Upper Burma the outlay on Imperial military works forms a much larger proportion of the total expenditure than in the lower province. This outlay was incurred chiefly in the construction of barracks.

The chief civil buildings in progress were residencies for the superintendents of the Northern and Southern Shan States; houses for commissioners, &c.; police lines and jails at Minbu and Kindat.

No important roads were commenced during the year. The chief works in progress under this head, were the improvement of the Ruby Mines-road; the extension of the Mandalay-Lashio-road; bridges over the Chaungzôn Nullah and Namsein River; extension and improvement of the Myingyan-Fort Stedman-road. Roads in the Chin Hills were considerably improved, and a mule-track opened out from Waingmaw on the east bank of the Irrawaddy to Sadôn in the Kachin Hills.

Central Provinces.

The expenditure in the Central Provinces was as follows:—

| | Rx. |
|---|---|
| Imperial Military | 387 |
| „ Civil | 2,110 |
| Provincial | 174,881 |
| Local | 31,988 |
| TOTAL | Rx. 209,366 |

The outlay under the heads of Imperial Military and Imperial Civil Buildings included no works of any importance. The expenditure from Provincial Funds was less than in the previous year. Under the head of Civil

Civil Buildings the greater portion of the available funds was absorbed by the requirements of the Departments of Law and Justice, and Jails. The new Law Courts at Nagpur were commenced in May 1892, and by the end of the year were well advanced towards completion. Considerable outlay was incurred on the Nagpur Central Jail, and progress was made in the construction of a hospital for the Jubbulpore Central Jail. BUILDINGS AND ROADS: CIVIL WORKS.

Compared with the previous year, the expenditure on new works of communication was much contracted. Only 3·1 lakhs were spent as against 5·7 lakhs in 1891-92.

The high level bridge over the Suktawa River was completed, and work was started on a bridge over the Machna at Shahpur. Preliminary steps were being taken in a scheme for improving the system of roads connecting the stations of Betul, Chhindwara, Seoni, Balaghat, and Mandla.

The Balramdass Water Works were practically completed and were opened in December 1892, and sanction was given to the scheme for the Rajnandgaon Waterworks, which are estimated to cost Rx. 12,936.

The output of coal at the Warora Colliery, which amounted to 107,272 tons, was smaller than in the previous year. At the Umaria Colliery the supply exceeded the demand. The total output amounted to 97,001 tons.

The outlay for the year in Assam amounted to Rx. 280,683, and showed a considerable increase over the expenditure of the previous year. The total outlay was divided between Imperial, Provincial, and Local, as follows: — Assam.

| | Rx. |
|---|---|
| Imperial Military | 9,654 |
| Imperial Civil | 77,474 |
| Provincial | 132,177 |
| Local | 61,378 |
| TOTAL | Rx. 280,683 |

The most important work in progress under the head of Imperial Civil Works is the construction of the road between Nichuguard and Manipur. This road will be 132 miles long, and is estimated to cost Rx. 178,394. About 40 miles were opened for traffic during the year.

The most important items of the Provincial expenditure were also the construction and maintenance of roads. The chief works under the head of Buildings were the military police lines and jail at Kohima, a Munsif's Court at Sylhet, and a sub-divisional officer's residence at Habiganj. The outlay on roads included expenditure incurred in the construction of bridges on the Companyganj-Salutikar and Fenchuganj roads, and in improving and bridging the North Trunk-road from North Lakhimpur to Dikrang. The Silchar-Aijal, road was aligned, and the Kohima-Cheswejuma-road completed during the year.

Among miscellaneous works the construction of the canal along the left bank of the Desang River may be mentioned. The public works of local boards were of the usual character, and do not call for special notice.

The expenditure by the Buildings and Roads Branch in Madras for 1892–93 amounted to Rx. 730,323, of which Rx. 13,274 was Imperial, and included Rx. 9,569 on military works. Of the remainder Rx. 253,794 was Provincial, and Rx. 463,255 was Local Expenditure. Madras.

The famine relief operations, conducted by the Public Works Department, formed a special feature in the year's work. The districts in which the operations were carried on were Bellary, Anantapur, Kurnool, and Cuddapah.

The maximum number of persons employed in any one week, under all agencies in relief works throughout the Presidency was 91 065, but the number of persons exclusively employed in "professional agency" works, under the supervision of the Public Works Department, did not exceed 27,521.

The total expenditure incurred during the year on famine relief works under all heads, by the agency of the Public Works Department, was as follows:—

| | Rx. |
|---|---|
| Irrigation Works | 20,154 |
| Roads | 7,985 |
| Miscellaneous | 399 |
| Establishment | 6,727 |
| | 35,265 |

BUILDINGS AND ROADS: CIVIL WORKS.

Among the buildings in the Presidency town completed or in progress during the year, the most important was the new Law Courts, which was formally opened on the 12 July 1892. Large workshops for the College of Engineering were commenced, and extensions to the Presidency College were carried out. The establishment of a Law College at Madras has been sanctioned, and the detailed plans and estimates were in course of preparation. At Calicut the Collector's office was nearly completed, and progress was made with the Government House at Ootacamund.

Among the more important works of communication mention may be made of the road from Potinghi to Koraput, which was completed, and the improvements to the Vayitri-Gudalur-road. At the Coonoor Ghât and Kullar Bridge much damage was done by floods. Progress was made with the Mahasinghi and Suruliyar Bridges.

The following statement shows the length of road communication maintained by public authorities in Madras during the year 1892–93:—

| | Metalled Roads. | Unmetalled Roads. | TOTAL. |
|---|---|---|---|
| | Miles. | Miles. | Miles. |
| Maintained by Public Works Department - | 222 | 240 | 462 |
| Maintained by Local Authorities - - - | 11,293 | 10,195 | 21,488 |
| TOTAL - - - | 11,515 | 10,435 | 21,950 |

The Madras Harbour Works are approaching completion, and the progress made during the year was confined to the construction of the massive pier-heads, which entailed heavy and difficult work. Progress was also made in depositing the wave-breaker blocks on the outside of the two piers and in protecting the shore north of the harbour. The outlay for the year amounted to Rx. 25,602.

The projected improvements to the Harbour of Vizagapatam were deferred for want of funds. The proposal to construct an iron screw pile pier at Negapatam was also in abeyance.

Bombay (including Sind).

The expenditure in the Bombay Presidency for 1892–93 amounted to Rx. 669,607, of which Rx. 18,780 was for Military works and Rx. 650,827 for Civil works. The Imperial portion of the expenditure on Civil works amounted to Rx. 25,449. The most important outlay under this head was incurred in the provision of accommodation for the Customs and Salt Departments. The grant for the Somali Coast works amounted to Rx. 8,150; Provincial outlay amounted to Rx. 351,733, and Local outlay to Rx. 273,645. Under the head of Civil Buildings, in addition to the ordinary works carried out for the accommodation of the various branches of government, were included some works of special importance, such as the New European General Hospital at Bombay known as St. George's Hospital, which was completed in December 1892 at a cost of Rx. 57,642. Some additions were made to the Sir Dinshaw Maneckji Petit and Bai Moltibái Hospitals, and Dvárkádás Lallubhoy Dispensary. The expenditure on these buildings, which are now completed, has amounted to Rx. 46,248.

Among the more important works completed within the year may be also mentioned the new Revenue Offices at Broach, the new Distillery buildings at Surat, the Anjuman-i-Islam School, Bombay, and the Hospital for Women and Children at Poona.

Progress was made with the large Central Jails under construction at Ahmedabad and Hyderabad in Sind, and also with the scheme for the provision of suitable quarters for the police.

The total outlay on communications during the year amounted to Rx. 265,005. The length of road extension under operation amounted to 6½ miles from Imperial funds, 169¼ miles from Provincial funds, and 437¼ miles from Local funds. The most important of the bridges under construction was the Ellis bridge over the Sábarmati river at Ahmedabad, which replaces the bridge destroyed

destroyed by the extraordinary flood of 1875. This bridge, which was opened in September 1892, consists of 14 spans of 101½ feet, and has cost about 4½ lakhs of rupees. Of the works which were completed or in progress during the year under the head of Miscellaneous Public Improvements the most important were various schemes of water supply undertaken on behalf of municipalities. The chief of these works were the Dhulia Water Supply works from the Dedargaon Tank in the Khandesh Collectorate, and the Hubli Water Supply scheme in the Dhárwár Collectorate, both of which made good progress during the year. It is anticipated that the Dhulia Works will be completed by the end of the rains of 1894. Schemes of water supply for Ahmednagar, Násik, and Dhárwár were under consideration

Buildings and Roads: Civil Works.

The protective works to exclude the flood water of the Tapti river from the city of Surat were in progress during the year.

The total expenditure from all sources on Public Works in the Hyderabad Assigned Districts during the year under review, excluding railways, amounted to Rx. 172,520.

Berar.

Beyond the alterations to the Hyderabad Residency there were no Imperial Works in progress deserving notice.

The expenditure on provincial public works amounted to Rx. 121,177. These works included the usual class of buildings required by Government for administration and other purposes, as well as the construction and repair of roads. The length of bridged and metalled roads kept in repair by the Provincial Public Works Department, amounted to 861 miles.

Among miscellaneous public improvements was included a scheme for the water supply of the town of Akola, which is estimated to cost Rx. 57,470. The water supply at Buldana was completed during the year. A project for supplying the town of Secunderabad with water, estimated to cost Rx. 70,859, was in progress.

In Coorg there were no works in progress of sufficient importance or interest to deserve individual notice. The total outlay amounted to Rx. 17,950, which was chiefly under the head of Communications. About 88 miles of metalled road, and 90 miles of unmetalled roads were maintained from Imperial Funds, and about 131 miles from Local Funds.

Coorg.

A full account of the Public Works operations in the districts under Native administration in India cannot be given owing to the want of information in the case of some of the larger and more indepenent States. They include, however, many works of great public utility, and some of large size, in many cases carried out by European engineers lent by the British Government.

Native States.

The Imperial outlay for the year in the Public Works Department in the Central India Agency amounted to Rx. 23,490, in addition to which an expenditure of Rx. 4,253 was incurred from local and cantonment funds, and contributions from Native States. The expenditure was chiefly on communications. The operations of the Public Works Department in the Agency have been much reduced by the transfer to the chief Native States of the care of the metalled roads in their territories, which have been noticed in previous years' reports. The duties of the Public Works Department lie not only in maintaining important lines of communication, such as the Agra and Bombay, Nimach and Mhow, and Nowgong and Sutna roads, and in designing and executing projects within territories which are too intermixed or too impoverished to be treated on the footing of the larger States, but also in advising the States that are capable of executing their own projects as to the direction in which their efforts may be most usefully exerted, and in inspecting the work done by the larger States on behalf of the Imperial Government. The policy of handing over the care of the roads to the more important States has hitherto been justified by the results.

Central India.

The expenditure in Gwalior amounted to about 9 lakhs of rupees. The most important buildings in progress were the Victoria College and Memorial Hospital. In the Indore State there was an outlay of Rx. 33,450. Among the buildings under construction may be mentioned the Native General Library, the Darbar Office buildings, and the Holkar College.

BUILDINGS AND ROADS: CIVIL WORKS.

Rajputana.

The expenditure on Public Works in Rajputana, exclusive of the outlay on Irrigation Works in Ajmere-Merwara, amounted, so far as is known, to Rx. 471,942, of which Rx. 426,373 was incurred in the Native States. A sum of Rx. 21,780 was expended in Meywar; the most important items being the construction of the Lansdowne Hospital, and Connaught Bund. In Marwar or Jodhpur, the outlay was Rx. 179,910, chiefly on railways. The most extensive irrigation work in progress was the Bilara Tank. In Jeypore there was an outlay of Rx. 109,071, the largest item of which was the expenditure on irrigation works. The only new buildings of any importance were the Raj buildings at Mount Abu, the Rahdari buildings in Eastern lines, and Nazim's house at Neemka Thana. Ulwar expended 5 lakhs, Kotah 2 lakhs, and Jhallawur 1 lakh of rupees on Public Works, but there was no individual work in progress of sufficient importance to call for notice.

Madras.

In the Native States under the control of the Madras Government there is little of any importance to note in connection with the construction of Public Works.

In Travancore the total sum expended was Rx. 140,851, of which about 4¼ lakhs was allotted to communications. Fifty miles of new road were opened for traffic, and Rx. 26,587 was expended on buildings.

In Cochin 23·9 per cent. of the total revenue was allotted to Public Works. The actual expenditure was Rx. 40,704, the largest item being the outlay on buildings.

In the Pudukkottai State there was an expenditure of Rx. 28,040 on Irrigation Works, roads and buildings. New public offices and a hospital were under construction.

Bombay.

Leaving out of account the railways which are dealt with in a separate section, the amounts expended by the Native States in Bombay on public works during the year were generally small, and there were no individual works of unusual importance to be recorded. The most important group of Native States lies in North Gujarát, and covers an area of about 44,000 square miles. Of the Chief States included in this area, Cutch expended Rx. 14,575, Palanpur, Rx. 7,181, Idar Rx. 944. In the Káthiáwár States the outlay in public works amounted to Rx. 227,700, Bhávnagar heading the list with an expenditure of Rx. 107,540. Rs. 21,522 was expended by the Agency Engineer, the principal work in course of construction being the Memorial Institute at Rájkot. It is stated that in Káthiáwár great progress has been made in the matter of roads and communications. Where there was not a single mile of road in 1865, there are now more than 600 miles, for the most part bridged and metalled. Various small sums were devoted to public works in Cambay, Rewa Kántha, and Nárukot.

In the groups of Native States comprised in South Gujarat and North and South Konkan, there is nothing in the public works expenditure to call for detailed notice. The largest amount expended was in Sávantvádi where there was an outlay of Rx. 11,738. The same remark applies to the States in the Deccan and South Mahrátha country. The largest items were an expenditure of Rx. 54,846 in Kolhapur, and of Rx. 12,124 in the Sangli State.

# XI.

# POST OFFICE AND TELEGRAPHS.

## POST OFFICE.

The receipts and charges of the Post Office for the last two years, as shown in the Finance and Revenue Accounts, are given in the following statement:— Post Office.

| Year. | Receipts. | Expenditure. | Net Revenue. | Net Charge. |
|---|---|---|---|---|
| | Rx. | Rx. | Rx. | Rx. |
| 1891–92 | 1,445,925 | 1,496,417 | — | 50,492 |
| 1892–93 | 1,488,863 | 1,518,556 | — | 29,693 |

The deficit of Rx. 29,693 is entirely on postal business. If indirect expenditure in connection with the Post Office were added, on the one hand, and a deduction made, on the other hand, of the charges for the district post (the receipts under which head are not credited to the Post Office), the net financial result would be a surplus of Rx. 25,094.

The extent of the sphere of operations of the Post Office, and its development during the last three years, are shown in the table in the margin. These figures are exclusive of the District Post, of which the Post Offices increased from 1,146 in 1891–92 to 1,307 in 1892–93, the letter-boxes from 2,443 to 2,595, and the staff of village postmen from 2,590 to 2,924.

| Year. | Post Offices. | Letter Boxes. | Village Postmen. | Length of Postal Lines. |
|---|---|---|---|---|
| | No. | No. | No. | Miles. |
| 1890–91 | 8,394 | 11,961 | 3,708 | 74,342 |
| 1891–92 | 8,617 | 12,848 | 3,762 | 77,728 |
| 1892–93 | 8,832 | 13,292 | 3,837 | 80,472 |
| Increase in 1892–93 over 1891–92 | 215 | 444 | 75 | 2,744 |

| Year. | Letters (including Postcards). | Newspapers. | Parcels. | Book and Pattern Packets. | Total. |
|---|---|---|---|---|---|
| | No. | No. | No. | No. | No. |
| 1891–92 | 300,619,812 | 25,910,386 | 2,108,685 | 10,711,051 | 339,349,934 |
| 1892–93 | 311,014,049 | 26,637,963 | 2,169,715 | 12,149,494 | 351,971,221 |
| Increase | 10,394,237 | 727,577 | 61,030 | 1,438,443 | 12,621,287 |

Of the increase of 2,744 miles in postal lines, 344 miles were under the head of railways, and were almost entirely due to the opening of new sections of railway in various parts of the country, while the total mileage of runners' lines increased by 1,713 miles, mainly owing to the conversion of District Post lines into Imperial Post lines in the Punjab. In addition to the 80,472 miles of Imperial Postal lines shown in the statement, there were 33,283 miles of District Post lines, so that the total length of the lines over which mails were conveyed was 113,755 miles at the close of 1892–93, as compared with 111,133 miles at the close of the previous year.

The general correspondence returns, of which a summary is given above show an increase of over 12½ millions of articles carried by post in 1892–93, as compared with 1891–92. Of this increase, nearly 4½ millions were due to letters and 7 millions to postcards, which represent nearly one half of the entire number of communications passing through the post.

Post Office.

In the Bombay Presidency, including Sind, each person received on an average rather more than two letters, while in Bengal, the Punjab, and Burma, each person received on an average, rather more than one letter. For the whole of India the vernacular correspondence was 55·37 per cent. of the entire correspondence. In the Bombay Presidency where postcards are largely used by natives, the vernacular correspondence was 65·41 per cent. of the whole.

The letters and postcards despatched from India to the United Kingdom in 1892–93 are estimated at 2,855,220 against 2,585,884 in 1891–92, or an increase of 10·42 per cent. Those received in India from the United Kingdom are estimated at 3,081,754 against 2,836,843 in the previous year, or an increase of 8·63 per cent. The effect of the reduction of letter postage to the United Kingdom from 1st January 1891 is now fully apparent. In each of the two years during which the reduced rates have been in force there has been an increase of more than half a million over the figures of the previous year in the aggregate number of letters and postcards exchanged with the United Kingdom. The number of postcards exchanged with the United Kingdom is, however, wholly insignificant compared with the number of letters, and a noticeable feature of the year's exchange was a falling off of about 28 per cent. in the number of postcards received from home.

The number of parcels exchanged with the United Kingdom formed more than 80 per cent. of the whole foreign parcel traffic. There was an increase of 6,646 in the parcels exchanged through the British Post Office; but those transmitted to India through the agency of the Peninsular and Oriental Company fell from 45,374 to 6,580. This decrease was due to the reduction, from 1st January 1892, of the packet postage rates, and the consequent almost total extinction of the business in Peninsular and Oriental book parcels below 5 lbs. in weight, and the reduction by about 50 per cent. in the number of book parcels above that weight. The number of parcels exchanged between India and foreign countries in 1892–93 was 35,847 as compared with 29,379 in the previous year.

The receipts from the insurance of letters and parcels fell to Rx. 19,325, as compared with Rx. 20,274 in the preceding year. The number of insured articles was less by ·67 per cent., the decrease being entirely in the number of parcels insured, and being due to the introduction, from the 1st May 1890, of a limit of Rs. 1,000 to the value for which a postal article can be insured. The amount paid as compensation was Rx. 215, being 1·11 per cent. of the insurance fees, as compared with Rx. 471 and 2·32 per cent. in 1891–92. There were three cases of highway robbery of the mail in Native States during the year, in which insured articles were carried off to the aggregate value of Rx. 467, Rs. 374 of which was recovered from the Native States concerned. The number of articles sent by the value-payable post was over 1,400,000, and the amount recovered by the Post Office from the addressees and repaid to the senders was Rx. 1,516,484. Nearly half of the entire business of the year of this description was transacted in the Bengal circle, which practically means Calcutta. An arrangement with Ceylon for the transaction of value-payable business has been in force for two complete years, and the business is steadily increasing, the effect being that India supplies Ceylon with a considerable quantity of goods. The number and value of inland money orders issued in India, excluding transactions with Native States, increased respectively from $7\frac{3}{4}$ millions and Rx. 16,441,000 in 1891–92 to nearly $8\frac{1}{4}$ millions and Rx. 17,192,000 in 1892–93; and the commission realised, from nearly Rx. 206,000 to Rx. 216,000. The plan of remittance in use in India is the payment of money orders at the homes of the persons to whom they are sent, a system which only a few European countries have yet adopted, and one which necessarily imposes much responsibility on postmasters as well as on postmen; but experience has shown that the organisation of the Post Office is not unequal to the task which it has undertaken. The average value of an inland money order was Rs. 20. 13a. 10p., against Rs. 21. 1a. 11p. in the previous year. The application of the money order system to the remittance of land revenue and miscellaneous

miscellaneous Government dues continues to make steady progress in the North-West Provinces and Oudh, and in the Lower Provinces of Bengal. The revenue money order system was introduced as an experiment into six districts of the Madras Presidency and is still under trial; but, owing to the character of the land revenue system in that Presidency, where the ryots are able to pay all Government demands in their own villages, it is not expected that money orders will ever be largely used for revenue remittances. It has been recently decided to apply the same system to the Punjab and the Central Provinces, trial experiments having been made in selected districts in both Provinces. The rent money order system has proved a success in the Lower Provinces of Bengal as well as in the North-West Provinces and Oudh. Post Office.

The system of telegraphic money orders continues to grow in popularity, and the amount thus remitted in 1892–93 was Rx. 1,160,112 against Rx. 1,066,999 in the previous year.

The remittances from India to the United Kingdom by money orders fell from 142,322*l.* in 1891–92 to 129,285*l.* in 1892–93. Those from the United Kingdom to India increased from 72,618*l.* to 78,033*l.*

The deposits in the Post Office Savings Banks rose from Rx. 4,036,708 in 1891–92 to Rx. 4,145,243 in the year under report; the withdrawals from Rx. 3,565,023 to Rx. 3,655,195; and the interest from Rx. 240,891 to Rx. 269,409. The balance at the credit of depositors at the close of 1892–93 stood at Rx. 7,818,773, against Rx. 7,059,316 at the close of 1891–92. The average balance at the credit of each depositor was Rs. 150·08 as compared with Rs. 152·32 in the previous year. Of the total number of accounts nearly 90 per cent. were held by natives.

During 1892–93 the total amount invested in Government securities by Savings Bank depositors through the agency of the Post Office was Rx. 26,210 against Rx. 10,890 in the preceding year; and the balance of securities in the hands of the Comptroller General at the close of the year was Rx. 39,740, compared with Rx. 36,820 on the 31st March 1892. The sales numbered 26 against 34 in 1891–92. In the Bombay circle, there was an unusual increase in purchases and a decrease in sales, which were probably due to a temporary feeling of insecurity caused at the time by the failure of the Oriental Bank.

An arrangement for the sale of Government quinine to the poorer classes through the agency of the Post Office has been introduced, as an experimental measure, in Bengal, Assam, and Burma, and is being gradually extended to other provinces.

## TELEGRAPH DEPARTMENT.

The following statement refers to the whole of the Telegraph System under the control of the Government of India, including the portion of the Kashmir Telegraph System, which was brought under its control during the year, but excluding the Indo-European section, extending from Karachi to Teheran, for which, as usual, a separate account is given. The system now consists of 41,030 miles of line, 126,251 miles of wire, and 274 miles of cable. Telegraph Department.

During the year Rx. 216,281 were added to the capital expenditure, of which the greater portion was for new lines, the net additions to the system during the year comprising 2,405 miles of line, 6,092 miles of wire, and 21 miles of cable. The total capital outlay at the close of the year stood at Rx. 5,434,661.

The number of telegraph offices open to the public at the end of the year was 3,424, of which 1,100 were departmental or combined offices, and 2,324 were on railways and canals; the net addition to the number of offices during the year was 178.

TELEGRAPH DEPARTMENT.

The following statement shows for a period of five years the progress that has been made in extending public telegraphic communication :—

| | Capital Expenditure. | Miles of Line. | Miles of Wire. | Miles of Cable. | Offices Opened. | | |
|---|---|---|---|---|---|---|---|
| | | | | | Departmental, Ordinary and Postal combined. | Railway and Canal. | TOTAL. |
| | Rs. | | | | | | |
| Up to beginning of 1888–89 - | 4,49,58,470 | 31,894 | 93,517 | 226 | 745 | 1,243 | 1,988 |
| During 1888–89 - - - | 16,38,755 | 1,568 | 6,137 | 4 | 52 | 91 | 143 |
| „ 1889–90 - - - | 16,75,871 | 1,817 | 6,485 | — | 83 | 77 | 160 |
| „ 1890–91 - - - | 19,68,580 | 1,791 | 7,373 | 21 | 69 | 17 | 86 |
| „ 1891–92 - - - | 19,42,128 | 1,555 | 6,647 | 2 | 52 | — 33 | 19 |
| „ 1892–93 - - - | 21,62,811 | 2,405 | 6,092 | 21 | 99 | 58 | 157 |
| To end of 1892–93 - - | 5,43,46,615 | 41,030 | 1,26,251 | 274 | 1,100 | * 1,453 | 2,553 |

* Excludes 871 offices, which, though open to the public, were entirely in the hands of railway companies.

A general view of the operations of the Department in 1892–93, in comparison with the results of the five previous years' working, will be gained from the following statement :—

| Year. | Number of Messages during Year. | Revenue for Year. | Expenditure on Revenue Account. | Surplus on Revenue Account. | Total Outlay on Capital Account to end of Year. | Per-centage of Net Revenue on Capital Outlay. | Capital Outlay during Year. |
|---|---|---|---|---|---|---|---|
| | | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| 1887–88 - | 2,802,299 | 662,866 | 429,224 | 233,642 | 4,277,758 | 5·46 | 234,955 |
| 1888–89 - - | 2,978,998 | 632,247 | 434,223 | 198,024 | 4,659,722 | 4·45 | 377,654 |
| 1889–90 - - | 3,132,571 | 663,098 | 453,645 | 209,453 | 4,827,309 | 4·34 | 171,896 |
| 1890–91 - - | 3,407,100 | 682,885 | 468,880 | 214,005 | 5,024,168 | 4·26 | 196,858 |
| 1891–92 - - | 3,808,998 | 743,009 | 483,430 | 259,579 | 5,218,380 | 4·97 | 194,212 |
| 1892–93 - - | 3,981,411 | 758,317 | 515,700 | 242,617 | 5,434,661 | 4·46 | 216,281 |

The whole of the annual expenses connected with the telegraphs in India, whether incurred on capital account for the construction of new lines, or on revenue account for the maintenance and working of the system, are defrayed from the revenues of the Government of India. In 1892–93 the receipts of the Department were sufficient to cover both the working expenses and the amount expended on capital account, and there was therefore no net charge on Government revenues.

The operations of the Department during the year may be considered satisfactory, although owing to increased revenue outlay the net receipts were less than in 1891–92. The increased expenditure is partly due to the facts that extensive renewals of material are now required on the older lines, and that the outlay on this account was exceptionally low in the year 1891–92. A larger signalling establishment has also been found necessary to cope with the growth of the message traffic.

The

The following table shows the total number of telegrams, State and private, inland and foreign, despatched during the last two years, and the revenue derived from them :— TELEGRAPH DEPARTMENT.

| | 1891–92. | | 1892–93. | |
|---|---|---|---|---|
| | Number. | Value. | Number. | Value. |
| | | Rx. | | Rx. |
| State Inland - - - - - | 661,904 | 145,477 | 604,124 | 119,942 |
| „ Foreign - - - - - | 6,404 | 4,847 | 6,164 | 5,238 |
| Total, State - - - | 668,308 | 150,324 | 610,288 | 125,180 |
| Private Inland - - - - | 2,627,408 | 269,543 | 2,837,513 | 288,856 |
| „ Foreign - - - - | 513,282 | 148,405 | 533,610 | 162,758 |
| Total, Private - - - | 3,140,690 | 417,948 | 3,371,123 | 451,614 |
| GRAND TOTAL - - - | 3,808,998 | 568,272 | 3,981,411 | 576,795 |

The messages sent in the service of the State constituted rather more than 15 per cent. of the whole number, and the payments made by the Government on account of them, made up 21 per cent. of the total revenue of the Department, 21 per cent. in value of the total traffic of the department. The greatly increasing use of telegraphy by the Indian public is gauged by the growth of the inland private traffic, and it is satisfactory to find that in the year under review this class of traffic, when compared with the figures of the preceding year, increased by 8·0 per cent. in number and 7·16 per cent. in value. The following statement shows the development of the revenue from the inland private traffic for the past 10 years :—

| | Rx. |
|---|---|
| 1883–84 - - - - - - - - | 141,575 |
| 1884–85 - - - - - - - - | 150,463 |
| 1885–86 - - - - - - - - | 163,816 |
| 1886–87 - - - - - - - - | 181,779 |
| 1887–88 - - - - - - - - | 198,181 |
| 1888–89 - - - - - - - - | 223,151 |
| 1889–90 - - - - - - - - | 227,830 |
| 1890–91 - - - - - - - - | 245,328 |
| 1891–92 - - - - - - - - | 269,542 |
| 1892–93 - - - - - - - - | 288,856 |

The following figures show the division of the Inland traffic into the three classes of Urgent, Ordinary, and Deferred, during the last two years :—

| | PERCENTAGES. | | | | | |
|---|---|---|---|---|---|---|
| | Urgent. | | Ordinary. | | Deferred. | |
| | 1892–93. | 1891–92. | 1892–93. | 1891–92. | 1892–93. | 1891–92. |
| State - - - - - | 11·66 | 13·55 | 19·00 | 19·03 | 69·34 | 67·42 |
| Private - - - - | 6·04 | 5·48 | 42·36 | 43·08 | 51·60 | 51·44 |
| Press - - - - - | 5·41 | 5·76 | 22·70 | 24·93 | 71·89 | 69·31 |

TELEGRAPH DEPARTMENT.

A comparison of the figures for 1892–93, with the average figures for the five previous years, shows that the deferred class of message is steadily gaining in popularity.

The strength of the signalling establishment amounted at the close of the year to 3,070, of whom 1,635 were departmental officers, 351 British military signallers, and 1,064 postal clerks. The net increase during the year in the number of postal telegraph offices amounted to 91, and the number of such offices stood at 845 at the close of the year.

Taking into consideration the increase in traffic, the speed of transmission has been satisfactorily maintained over the main lines of communication. Between Calcutta and Karachi the average time of transmission was reduced from 36 to 25 minutes owing to the fact that messages no longer have to be retransmitted at Agra.

The number of complaints received relating to the Indian Telegraph Department was 1,218, or 0·027 of the total number of messages; and 629 were admitted, of which 209 applied to non-delivery, 134 to delay, and 194 to mistakes. The number of messages that for various causes could not be delivered amounted to 14,156, or 0·302 of the total number received for transmission.

The number of interruptions to communications amounted to 2,017, which is rather less than during the previous year, but the total duration of the interruptions was more. The principal causes of interruptions were cyclones, exceptional storms, and floods. It is satisfactory to notice that, compared with the previous year, preventible defects in lines and cables decreased in number from 313 to 184, and in duration from 5,045 hours to 2,952 hours.

The value of the remittances made by telegraphic money orders rose to Rx. 10,725.

The Inland press telegrams sent numbered 25,834, of the value of Rx. 9,508, against Rx. 9,659 in the previous year. The decrease is due to the fact that during 1891–92 there was a slight increase on account of the Manipur Expedition.

The Foreign press messages numbered 3,261, and the Indian share of the charges thereon amounted to Rx. 1,785.

As regards electrical improvements, the experiments made for the extension of the system of the duplex telegraphy over long distances have been most successful. The introduction of the system on the long circuits between Calcutta and Rangoon has resulted in the reduction of establishment employed on this one circuit alone of one Telegraph Master and twelve signallers.

The electrician of the Department was successful in transmitting messages of 1,000 words with Wheatstone's automatic apparatus between Calcutta and Nagpur, 770 miles, in four minutes, and between Calcutta and Bombay, 1,295 miles, in 5 minutes 10 seconds.

The experiments made with "dry" batteries show that no form has yet been brought forward which is suitable for work in India.

The employment of the telephone increased. At the end of the year 1892 there were 1,231 subscribers and 1,237 exchange connections to the Telephone Companies at Bombay, Calcutta, Karachi, Madras, Moulmein, and Rangoon. There were also 23 exchanges and 188 exchange connections under the control of the Telegraph Department.

The control of the Kashmir State Telegraph system was taken over by the Indian Telegraph Department during the year, and the construction of a line of telegraph from Srinagar towards Gilgit *viâ* the Burzil and Tragbal Passes was vigorously pushed forward, and the reconstruction of the line from Srinagar to the Kashmir Frontier (138 miles) was commenced.

The services of the officers of the Telegraph Department were utilised in the various military expeditions that took place during the year under review, and received the approval of the military authorities. Excellent work was also done by the Department in the instruction of the army in telegraphy and in connection with harbour defences.

## INDO-EUROPEAN TELEGRAPH DEPARTMENT.

Indo-European Section.

The system of Telegraph lines and cables connecting the terminus of the Indo-European Company's telegraphs at Teheran with the Indian Government system at Karachi, is known as the Indo-European Government Telegraph Department, and consists of two parts, one, designated the Persian Gulf Section, extending from Karachi to Bushire, with a branch to Fâo, where a connection is made with the Ottoman Government line; and the other, called the Persian Section, extending from Bushire to Teheran. It comprises 1,717 knots of cable, 1,377 miles of line, and 3,424 miles of wire, exclusive of the Persian Government line from Teheran to Mashed, 562 miles, which is maintained by the Department.

The administration of the Indo-European Department, which in 1888 was amalgamated with the general Telegraph system of India, has been re-transferred to London, with effect from 1st April 1893. It has been found convenient to maintain separate accounts for this section, partly for the sake of comparison with previous years, and partly because the conditions under which the Indo-European lines are worked, and the influences affecting the traffic are completely different from those prevailing on the Indian Telegraph system generally.

The capital account of the Department, which stood at Rx. 1,151,509 at the beginning of the year under review, amounted at its close to Rx. 1,145,969, a decrease of Rx. 5,540, which was due to a reduction of the stores balance.

The earnings on Indian, Trans-Indian, and Local Traffic, including the profit on mean rates *viâ* Turkey, amounted to Rx. 150,825, but adjustments on account of the Joint Purse of the Eastern and Indo-European Companies, and other items, reduced this sum to Rx. 127,651, which amount represents the message revenue of the year. To this an addition has to be made of Rx. 2,600 on account of Miscellaneous Receipts, making the total Revenue Receipts Rx. 130,251.

The traffic earnings were higher by Rs. 23,544 than in the previous year, although the actual number of messages carried was less than in the previous year by 9,589. The increase in value is due to the lower rates of exchange ruling during the year. The balance against the Department on the Joint Purse Account, which was Rs. 2,77,323 in 1891–92, was reduced to Rs. 1,61,321, a reduction of Rs. 1,16,002. The excess actually paid in to the Joint Purse amounted to 10,315*l.*, against 19,289*l.* in the previous year, the decrease being due to a larger proportion of the traffic having been sent by the Suez route.

The gross revenue charges amounted to Rs. 8,64,848 against Rs. 9,98,448 for 1891–92. The decrease is principally due to the smaller expenditure incurred on cable maintenance owing to the approaching completion of the renewals of the Persian Gulf cables; and also to the smaller outlay on line maintenance in the Persian Section owing to the re-insulation being nearly finished. The year's transactions resulted in a net profit of Rs. 4,37,668, compared with a profit of Rs. 1,62,034 in the previous year. The net profit is equivalent to a return of 3·8 per cent. on the Capital Outlay.

The financial results of working for the last five years are compared in the following statement:—

| YEAR. | Number of Messages during Year. | Receipts. | Working Expenses. | Net Receipts. | Dividend on Capital. | REMARKS. |
|---|---|---|---|---|---|---|
| | | Rx. | Rx. | Rx. | | |
| 1888–89 - | 115,444 | 114,460 | 95,322 | 19,138 | 1·72 | |
| 1889–90 - | 107,315 | 109,733 | 104,757 | 4,976 | 0·44 | Renewal of Cables. |
| 1890–91 - | 122,648 | 106,347 | 107,220 | —873 | — | |
| 1891–92 - | 127,089 | 116,048 | 99,844 | 16,204 | 1·40 | Re-insulation of Persian line. |
| 1892–93 - | 117,500 | 130,251 | 86,484 | 43,767 | 3·82 | |

TELEGRAPH DEPARTMENT.

The percentages of gross traffic carried by the Suez and Indo-European routes during the last three years are respectively as follows :—

| | Indian Traffic. | | Trans-Indian Traffic. | |
|---|---|---|---|---|
| | *Vid* Suez. | *Vid* Indo-European. | *Vid* Suez. | *Vid* Indo-European. |
| 1890–91 - - - - | 46·67 | 53·33 | 83·21 | 16·79 |
| 1891–92 - - - - | 43·52 | 56·48 | 80·75 | 19·25 |
| 1892–93 - - - - | 48·09 | 51·91 | 82·49 | 17·51 |

The following statement shows the division of the messages tendered for transmission during the last two years :—

| | | 1891–92. | 1892–93. |
|---|---|---|---|
| State - - - - - | Messages - - - - - | 3,318 | 2,866 |
| | Words - - - - - | 105,353 | 91,235 |
| | Average words per message - - | 31·7 | 31·8 |
| Commercial and private - | Messages - - - - - | 122,037 | 113,157 |
| | Words - - - - - | 1,577,445 | 1,459,295 |
| | Average - - - - - | 12·9 | 12·9 |
| Press - - - - - | Messages - - - - - | 1,323 | 1,091 |
| | Words - - - - - | 45,979 | 44,451 |
| | Average - - - - - | 34·7 | 40·7 |
| "The Times" - - - | Messages - - - - - | 411 | 386 |
| | Words - - - - - | 82,178 | 65,310 |
| | Average - - - - - | 200 | 169·2 |

The percentage of errors in the Persian Section was 0·245 and in the Gulf Section 0·121. The accuracy of transmission between Karachi and Teheran thus amounted to 99·6 per cent. There were 120 complaints of error, delay and non-delivery against 98 in the previous year.

There was a satisfactory improvement in the average rate of transmission of messages between Karachi and Teheran. The rate in 1891–92 was 8 minutes 42 seconds, while during the year under review it was only 5 minutes 51 seconds. In the reverse direction, *i.e.*, between Teheran and Karachi, the rate was also reduced from 6 minutes 25 seconds in 1891–92 to 4 minutes 26 seconds during the year under review.

On the Jask-Bushire cable duplex working has been very successful, and instruments have been received for extending similar working between Jask and Karachi.

Communication was not once interrupted between Karachi and Teheran throughout the year, while *vid* Turkey an interruption occurred on the Fao-Bushire cable, which lasted over 10 days. Beyond Teheran the interruptions which stopped traffic amounted to nearly six days in all. The Turkish route beyond Fao was interrupted for 108 days.

The

The average monthly mean rate of transmission between the United Kingdom and Karachi compares as follows with that in previous years :— TELEGRAPH DEPARTMENT

| | *Viâ* Teheran. | *Viâ* Turkey. |
|---|---|---|
| | H. M. | H. M. |
| 1888–89 - - - - | 1 4 | 19 28 |
| 1889–90 - - - - | 0 59 | 12 14 |
| 1890–91 - - - - | 0 59 | 10 25 |
| 1891–92 - - - - | 0 59 | 16 12 |
| 1892–93 - - - - | 0 45 | 27 47 |

The percentages of traffic sent by the two routes were respectively 92·9 and 7·0.

EDUCATION.

## CHAPTER XII.

## EDUCATION AND LITERATURE.

EDUCATIONAL institutions in India are divided into—

(1.) Those in which the course of study conforms to the standard prescribed by the Department of Public Instruction or by the University, and which are either inspected by the Department, or regularly present pupils at the public examinations held by the Department, or by the University. These institutions are called "public."

(2.) Those which do not fulfil the above conditions, which are called private.

The system of education operates, generally speaking, through three grades of institutions, viz. :—

(1.) Primary schools, which aim at teaching reading and writing, and such elementary knowledge as will enable a peasant to look after his own interests ;

(2.) Secondary schools ; and

(3.) Colleges.

Bengal.

The statistics of 1892–93 show an increase in the number of students in colleges in Bengal, as compared with 1891, from 5,225 to 5,443. The number of students who appeared at the first Art Examination in 1892 was 2,310, of whom 1,011 were successful ; of 967 candidates for the degree of B.A. in 1892, 280 passed, whilst in 1893, 301 passed out of 987 candidates. For the degree of M.A., 77 candidates presented themselves for examination, and of these 54 were successful. The total expenditure on these institutions was about Rx. 70,710, of which about Rx. 27,992 was contributed from public funds.

The number of secondary schools rose from 2,285 to 2,326, and the number of pupils from 194,178 to 198,270. The increase occurred in middle English, and middle Vernacular schools, high English schools having decreased by one. The total expenditure on secondary schools was Rx. 268,313, of which Rx. 59,049 was public money. Institutions under public management continued to hold the first place with an average of 81 per cent. of successful candidates at the University Entrance Examination, aided schools following with a percentage of 66, and unaided schools with 59.

It is satisfactory to notice that a perceptible improvement is said to be taking place in the *morale* of the pupils, and a taste for physical exercise is slowly growing up amongst the rising generation throughout the Province.

In primary schools the returns show a loss of 1,054 schools as compared with 1891–92, but the decrease in the number of pupils was only 317. The decrease in the number of schools occurs entirely in the lower class, and is accounted for by the poverty caused by the agricultural distress in Orissa and Patna. The number of upper primary schools has increased during the year, and the returns show a steady growth in the last five years. The expenditure from public funds on primary schools was Rx. 78,742 in 1892, of which Rx. 16,966 was contributed from provincial revenues, and Rx. 61,776 from district funds.

District Boards are now beginning to recognise the value of technical education, and the Government of Bengal was considering in what manner local efforts could best be turned to practical advantage.

The only point calling for special notice in regard to European education is the large and increasing proportion of scholars in the Roman Catholic schools, which is now more than 53 per cent., though Roman Catholics form only about 30 per cent of the European and Eurasian population of Bengal. The total number of scholars of this class has increased in the last 10 years by more than 33 per cent.

During

EDUCATION.

North West Provinces and Oudh.

During the last five years the number of schools and colleges in the North West Provinces and Oudh has declined from 11,762 to 10,868, and the number of scholars from 311,893 to 289,416. This result is caused by the abolition of a large number of inefficient schools, the funds thus set free being applied towards improving the quality of the instruction given elsewhere. The expansion of University and high education during this period has accordingly been considerable, the number of scholars attending colleges and high schools respectively having increased from 1,521 and 1,880 in 1887–88 to 2,641 and 2,458 in 1892–93. All other stages show a decrease.

Since the previous year, three new colleges have been added to the list, and one ceased to give instruction beyond the matriculation stage. The intermediate examination was for the first time divided into a literary and scientific course, corresponding to the course for the B.A. examination. The literary course attracted 259 candidates, of whom 116 passed; for the scientific course 78 candidates presented themselves, of whom 51 passed. For the B.A. degree there were 227 candidates, of whom 107 out of 184 passed in the literary, and 26 out of 43 in the scientific course. For the M.A. degree there were only 20 candidates, of whom 14 passed. The number of Anglo-vernacular or English-teaching schools was 113, of which 37, with 7,036 pupils, were State schools, and 76, with 12,009 scholars, were aided. The average expenditure per pupil in State schools is considerably higher than in aided schools, but the higher expenditure has resulted in a higher average standard of instruction.

The teaching of science and drawing was experimentally introduced in certain selected high schools during the year. About 50 per cent. of candidates from Anglo-vernacular schools passed the matriculation examination for the University. There was considerable progress in the matter of out-door games and gymnastics.

Of vernacular schools, the higher class (which are really primary schools in respect of two-thirds of their attendance) numbered 315, all maintained by the State, and the average monthly number of pupils was 26,915. The lower class or primary schools numbered 3,878 with 140,395 scholars, the corresponding figures for 1891–92 having been 3,928 and 135,757. Thus a reduction in the number of schools has been followed by an increase in the number of scholars, but it appears that education had not yet penetrated to the actual tillers of the soil, as the great majority of the pupils are of the higher castes.

The education of native girls was still in a very backward condition, and the results of such attempts as have been made (mainly by missionaries) was not encouraging.

Punjab.

There were in the Punjab in 1892–93, 164 fewer schools and colleges, and about 9,000, or 4 per cent., fewer scholars than in the previous year. This is attributed chiefly to the unhealthiness of the year, and the loss fell mainly upon private primary schools. In round numbers, about 200,000 persons out of a total population of 20,000,000 are being educated to a greater or less extent, and of these about three-fourths obtain instruction in "public" institutions. The proportion of boys who attend school to those of school-going age is about one in eight, and of girls less than one in 100. The expenditure on schools from public funds increased during the year by nearly Rx. 14,000; but contributions by municipalities declined. The number of students who presented themselves at the University Arts Examinations was somewhat larger than in the previous year, and about 41 per cent. of the candidates succeeded in passing for the B.A. degree, whilst seven out of 12 were successful in the M.A. test. The experiment of providing an advanced education through the medium of the Oriental languages, which has been tried by means of the Oriental College, has proved very costly and cannot be considered to be a success; in the present year nearly two-thirds of the candidates failed. The number of pupils in secondary schools increased slightly during the year, and over 10 per cent. of the scholars now pass beyond the primary stage. The Anglo-Vernacular Schools are increasing in popularity, because the training which they afford is the likeliest road by which to reach the Government Service. Primary schools showed a diminished attendance, and the special Zemindari schools, which

EDUCATION.

were designed to meet the wants of the agricultural population, were not successful. Improvement was noticed in the moral tone and discipline of the schools of all classes, and greater attention was devoted to physical training. In female education there were some slight signs of progress, but the prospect was not encouraging.

Burma.

In Lower Burma, owing to the removal from the list of public institutions of certain inefficient schools in the Thayetmyo District, the number of public schools fell from 2,781 to 2,577; but the list of "private" institutions was swelled by the addition not only of the above, but also of certain hitherto unknown schools, from 3,366 to 3,942. In public schools there was a decrease of more than 2,000 pupils; but the total number of pupils in all schools increased by over 5,000. The average daily attendance at Rangoon College rose to 48, as compared with 42 in the previous year. The results of the examinations were also good. In secondary schools there was a marked increase in attendance, and the result of examinations was good. In primary schools, though the number decreased, the quality of instruction improved. In the Arakan Division school fees were unpopular, and no general desire for education appeared to exist. Female education was progressing satisfactorily, for, though the higher schools decreased by eight, they had 30 more pupils, and the number of girls attending indigenous schools increased largely.

In Upper Burma the unfortunate attitude of hostility to secular instruction assumed by some leading Buddhist ecclesiastics at Mandalay, caused a decrease of 1,316 in "public" primary schools, which involved a loss of 10,087 pupils. The higher grades of secondary schools appeared for the first time in the returns, and private schools rose in number from 2,458 with 10,277 pupils to 5,757 with 45,927 pupils. This was partly accounted for by the withdrawal of inspection from monastic schools. The number of Buddhists receiving secondary education more than doubled during the year. Considerable improvement was observed in the primary schools, and away from Mandalay the opposition to secular education was dying out. The education of girls showed very satisfactory progress.

Central Provinces.

In these Provinces special attention was paid to the development of primary education, and as many as 300 new schools were opened by the end of the year under review. The difficulty of securing an adequate teaching staff was being met by the formation of training classes for village schoolmasters in connection with the principal secondary schools. The provision of boarding-houses for the reception of pupils in middle and high schools was undertaken in order to meet the increased demand. The desire of the administration to encourage a practical as distinguished from a purely literary training was manifested by the introduction during this year of the "School Final Examination" of the Allahabad University. The number of high schools and colleges remain unchanged; all other classes showing a large increase except English middle schools which decreased by one. The number of girls receiving education increased from 5,990 to 6,374.

Assam.

The number of schools in Assam during the year increased by 184, and that of scholars by 4,734, the chief increase being in the primary stage. A noteworthy feature in the year's report is the establishment of an Arts College, founded by a Sylhet Zamindar. The total number of high schools increased by one, an unaided middle English school being raised to the status of a high school. The results of examinations in this class of schools were satisfactory and compared very favourably with those of the previous year. The same may be said of the middle English and vernacular schools; but in the former class there was a slight falling off in the attendance. In primary schools there was a satisfactory increase both of numbers and attendance, especially in the lower class of aided schools. In female education a considerable advance in the number of pupils was recorded, but the difficulty of persuading parents to allow their daughters to appear at a public examination has not yet been overcome.

Coorg.

The report on education in Coorg shows a satisfactory increase in attendance, and the Province compares favourably with any other Province in respect both of male and female education, nearly every Coorg boy and quite 25 per cent. of Coorg girls being at school. The education of the

the lower or Pariah classes in North Coorg continues in a very backward condition. EDUCATION.

In Berar the number both of schools and scholars, males and females, increased during the year, the increase in aided schools being especially satisfactory. The hope of inducing the wild tribes of Kurkus and Gonds to send their children to school is still far from realisation. The points to which special attention had to be directed were female and industrial education. Berar.

In Madras 15 candidates presented themselves for the M.A. examination of the University, as against 16 in the previous year. Of these 10 were successful in passing, as against 6 in 1891–92. The numbers of candidates who under the revised bye-laws appeared for the three divisions of the B.A. examinations, namely the English Language, Second Language and Science Divisions, were respectively, 658, 649, and 594, of whom 510, 569 and 312 proved successful. The number of first grade colleges rose during the year from 11 to 12, and the strength of the B.A. classes from 1,056 to 1,355, while the students attending the F.A. classes declined from 1,652 to 1,203. This decrease is to be referred wholly to the Junior F.A. class, which did not receive the usual supply of students in consequence of the very poor results of the preceding Matriculation examination. The number of second grade colleges decreased by one during the year, and the attendance of the F.A. classes fell from 1,099 to 966. The number of candidates who appeared at the Matriculation examination under the revised bye-laws was 3,369 as compared with 7,907 in the previous year. The decrease was more serious than had been anticipated, but was in part accounted for by the rule restricting admissions, except in special cases, to pupils who had studied in recognised high schools for a certain period. Of the 3,369 candidates, only 520 passed, being a percentage of 15·4, as against 30·1 in the previous year. The number of public upper secondary schools for boys fell from 136 to 134, but the strength of the upper secondary classes increased from 8,594 to 10,071 and that of the lower secondary classes from 10,853 to 11,432. Omitting lower secondary departments of high schools, the number of lower secondary English schools fell from 355 to 226. This decrease was, however, apparent only, being due to a different mode of classification of English and vernacular schools. The latter were returned for the year as 234, against 89 in 1891–92. The total number of boys receiving lower secondary education rose from 22,328 to 23,506 during the year under review. The number of public primary schools for boys rose from 18,059 to 19,097, and that of the pupils in them from 517,638 to 550,446. The number of pupils in the upper primary stage was 35,825 as against 32,228 in 1891–92. Public primary schools for girls advanced in number from 796 to 808, and the attendance in them from 31,074 to 32,457. The number of private schools furnishing returns to the Department increased from 3,403 with 64,473 pupils to 3,455 with 65,894 pupils. The expenditure from all sources on education in Madras, omitting figures relating to private schools, advanced from Rx. 574,434 to Rx. 596,036. Of this sum Rx. 184,390 came from provincial funds, Rx. 76,977 from local funds, Rx. 21,874 from municipal funds, and the balance from fees, subscriptions, and other sources. Madras.

The total number of persons receiving instruction at institutions of all sorts in the Bombay Presidency, during the year under review, rose to 646,382 from 634,438 in the previous year. Of this total 575,369 pupils received instruction at 9,794 public institutions as compared with 566,606 at 9,501 public institutions in 1891–92; and 71,013 pupils were taught at 2,813 private institutions, as compared with 67,832 at 2,771 private institutions in the previous year. On the assumption that the population of school-going age is accurately represented by 15 per cent. of the whole population, the percentage of male scholars to male population of school-going age was 27·50, while that of female scholars was 3·87. The grand total of persons, both male and female, receiving education at whatever class of institution, represented 16·06 per cent. of the population of school-going age, against a percentage of 15·76 in the previous year. The increase of 293 public institutions and 8,763 persons attending them was fairly distributed over each department of education. The number of boys under instruction Bombay.

EDUCATION.

instruction in public institutions rose from 499,174 to 507,028 in the year under review, and that of girls from 67,432 to 68,341. The number of Hindus receiving instruction in public schools was 439,604, and of Mahomedans 98,691, the increase of pupils since the end of the previous year being 1·1 per cent in the case of the former and 1·55 per cent. in the case of the latter. The number of colleges increased by one during the year; the number of secondary schools by 14; and the number of primary schools by 276. There was an increase during the year in the expenditure upon public institutions from every source; and the total sum expended upon education was approximately 66⅓ lakhs of rupees against 62⅔ lakhs in the previous year. To this sum provincial funds contributed Rx. 196,563 or 29·7 per cent of the whole cost. The other sources contributing to the expenditure were, local cess 14·3 per cent., muncipal rates 6·2 per cent., fees 20·9 per cent., revenues of Native States (including cess and rates) 12·4 per cent., and all other sources 16·5 per cent.

The number of students who succeeded in passing the first B.A. examination was 82, while 68 passed the intermediate examination. For the entrance examination 1,571 candidates were sent up by the schools, of whom 917 passed, while only 137 passed out of 1,348 who went up without school certificates. The number of girls receiving a primary education inceased from 41,253 in 1891–92 to 41,693 during the year.

## LITERATURE AND THE PRESS.

LITERATURE.

The Act XXV. of 1867, passed by the Governor General of India in Council, for the regulation of printing presses and newspapers, provided, amongst other things, that every book or paper printed within British India shall have printed legibly on it the name of the printer and the place of printing, and (if the book or paper be published) of the publisher, and the place of publication. It also provided for the registration of every book, pamphlet, map, &c., printed or lithographed in British India.

This Act was modified by Act X. of 1890.

Bengal.

The total number of English newspapers published in Bengal during the year 1892–93 was 40, and the total number of periodicals was 17. Sixty-four vernacular newspapers were published. The number of publications received in the Bengal Library was 1,675, against 2,177 in the preceding year; of these 289 were in English, 423 were periodicals, 275 bi-lingual and 977 uni-lingual; of the last class 548 were in Bengali, 202 in English, 71 in Hindi, 60 in Sanskrit, 45 in Uriya, and 14 in Urdu. Of the original works of the year, 205 dealt with "Language," 106 treated of "Religion," 92 of "Poetry," 65 of "Science," 58 of "History," 44 of "Fiction," and 33 "Drama."

During the year, 1,763 publications were registered under the Act, against 1,550 in 1891–92.

North West Provinces and Oude.

In the North West Provinces and Oude, 23 new papers were started during the year, and 27 ceased to be published, leaving 83 on the register. The majority of the papers are weekly publications. 22 are published in Lucknow, 16 in Maradabad, 14 in Agra, 11 in Cawnpore, eight in Benares, six in Fategarh, and five in Allahabad. Very many of the papers are devoted to religion or to the interests of a particular community; others concern themselves with local events, while not a few persistently attack the conduct and character of Government officials.

Of works in the English language there were 61 publications, one more than in the previous year.

There were 902 publications during the year, as against 959 in 1891–92. The decline in the number was mainly in publications in Arabic, Persian, and Polyglot.

Punjab.

In the Punjab 65 newspapers were published during the year; thirteen had a circulation of 500 copies or upwards. "The Tribune," the only one published in English, had a circulation of 1,400 copies. The total number of publications registered under Act XXV. of 1867 was 1,483, of which 1,098 were original works, and 385 re-publications and translations; 345 were of an educational and 1,138 of a non-educational character. Of the 1,483 works, 745 were in Urdu, 308 in Punjabi, 86 in English, 79 in Hindi, 54 in Persian, 48 in Arabic, and seven in Sanskrit.

Forty-seven publications were registered during the year, against 176 in 1891–92; of these 11 were of an educational and 36 of a non-educational character. Religion was the subject of 23, language of 11, one treated of law and one of mathematics, and seven were dramatical or poetical compositions, 39 were original works, and eight re-publications or translations. Five of the publications were in English, 18 in Burmese, seven in English-Burmese, one in English-Karen, one in Pali, 11 in Pali-Burmese, one in Karen, one in Sgau-Karen, one in Shan, and one in French. LITERATURE. Burma.

The total number of periodicals published in Burma, irrespective of the daily advertising sheets, was 30, of which five were printed in the Arakan division, 15 in the Pegu division, five in the Tenasserim division, two in the Irrawaddy division, and three in the Northern division.

Ten vernacular and English newspapers are published in the Central Provinces. Eight publications were registered during the year, of which three were in Hindi, three in Marathi, one in Hindi and English, and one in English. Central Provinces.

There was nothing under the head of Literature and the Press calling for special notice, as regards Ajmere, Coorg, and Bangalore. Ajmere, Coorg, and Bangalore.

There was a great increase in the number of publications registered in Madras during the year, the total number being 982, as against 784 registered in 1891–92. The number of books and pamphlets was 799, and that of periodicals 183. Out of the total number 695 were original works, 206 re-publications, and 81 translations. Reprints (without alterations) are no longer brought for registration; and works which are republished or translated are generally of some value. 242 were published in English; 740 in the vernacular languages spoken in the Province. Of the latter publications those in Tamil (283) take the foremost place, while those in Telugu (199) and Sanskrit (66) rank next. There were 163 poetical works, as against only 59 the previous year. Religious publications numbered 362. A few works on music appeared during the year, their appearance being probably, to some extent, due to the foundation of the Madras School of Music. 272 works were copyrighted, against 240 in the previous year. Madras.

The total number of publications registered in Bombay during the year was 1,368—viz., 860 books and 508 periodicals. Of these 1,003 were original works, 221 re-publications not previously registered, and 144 translations. The total was below that for 1891, which was 1,408. The number of books published in English rose from 71 to 82 and that of periodicals from 66 to 95. Bombay.

Gujarati works numbered 430, Mahrati 405, as against 527 and 387 respectively in the previous year. Publications in Urdu rose from 25 to 41, while those in Hindi fell from 22 to 21. In the classical languages there were 43 Sanskrit publications, four in Persian, six in Arabic, and four in Hebrew.

The number of works registered for copyright during 1892 were 322, against 409 in the preceding year. Of these 274 were private and 48 were Government publications. The literary productions of 1892 were below those of the two previous years, both in point of quality and quantity. Indeed it would seem that, notwithstanding the spread of education, the amount of original vernacular literature that is yearly published is slowly but surely decreasing.

At the end of the year under review there were in all 148 newspapers and 28 periodicals treating of current matters, against 137 newspapers and 23 periodicals of the previous year. There was no appreciable improvement in the circulation of newspapers over that of 1891–92.

The number of books registered in Berar was 21, against 13 in the previous year. Berar.

## CHAPTER XIII.

EMIGRATION.

## EMIGRATION AND MIGRATION.

Calcutta.

In the year 1892 requisitions for adult labourers were received at Calcutta from only five colonies, with the following results :—

| | Required. | Supplies. |
|---|---|---|
| Demerara - - - - - | 4,555 | 4,438 |
| Trinidad - - - - - | 2,500 | 2,435 |
| Natal - - - - - - | 900 | 942 |
| Fiji - - - - - - | 1,370 | 1,450 |
| Surinam - - - - - | 1,233 | 1,150 |
| TOTAL - - - | 10,558 | 10,416 |

The demands were in all cases less than in 1891, and there were no demands from St. Lucia, Jamaica, or Mauritius. The terms on which emigrants were engaged continued to be the same as in the previous year, except with regard to Fiji and Natal. In the case of Fiji the age entitling an emigrant to rations and return passage was raised from 10 to 12 years; and in the case of Natal, the right to a license to leave the colony save with the written permission of the Protector was restricted to Immigrants who had resided in the colony for 10 years.

The number of recruiting licenses fell from 1,003 to 857, two of which only were cancelled on account of misconduct, as compared with fourteen in the previous years. The number of emigrants registered during the year was 17,225, the percentage recruited in Bengal and Behar being 30 as compared with 21 in 1891. The transfer of the recruiting ground from these provinces to the N. W. P. and Oudh, which was noticed in recent years, appears to have been checked. Only in the Shahabad District was there much competition between recruiters for the colonies and those for the Indian labour-districts; it is generally found that Hindustanis prefer, or are preferred for, the colonies, while Bengalis largely resort to Assam.

Of the total number of labourers registered, about 14 per cent. were either rejected for various reasons, or died or deserted, the remainder being forwarded to the Agencies' depôts. There was some improvement in the proportion of emigrants received at the depôts who were finally accepted as fit for labour in the colonies. This matter deserves and receives close attention, since the position of expectant emigrants who have broken up their homes and have to be dismissed with a small gratuity, is a very miserable one.

The health of coolies at the depôts and the sanitary arrangements are reported to have been satisfactory, and there was a marked absence of cholera and small-pox. The principal cause of sickness and mortality was chest affections. In the Natal depôt, in January and February, diseases of this class were especially rife and in a large number of cases proved fatal.

The detention of emigrants in the depôt for periods exceeding one month was less frequent than in the previous year; the cause in all cases was delay in the arrival and equipment of chartered vessels. The proportion of female to male emigrants was unusually high, in some cases considerably exceeding the prescribed 40 per cent.

The aggregate savings of the emigrants who returned to India during the year (5,225 in number) amounted to 8,15,247 rupees, or an average of 156 rupees per head. The best result was found amongst those who came back

back from Jamaica, 13 in number, who brought back an average of over 1,000 rupees each. By far the lowest average, viz., 23 rupees, was saved in Mauritius.

Natal was the only colony which drew supplies from Madras during the year. Seven shipments were made numbering 3,030 men, women, and children, the percentage of women to men being 42. The treatment of the coolies was very satisfactory, and, except for a mild outbreak of measles, their health was good throughout. Madras.

Two ships returned from Natal conveying 214 coolies whose savings amounted to 35,000 rupees ; and three from Mauritius conveying 679 coolies whose savings amounted to 13,744 rupees only.

## MIGRATION.

The total number of immigrants of all classes into Assam during 1892 showed an increase over the previous year of about 12 per cent., and the large number of men who were accompanied by their families is regarded as a proof of the growing popularity of the Assam tea-gardens. The main supply of coolies was, as usual, derived from Chota Nagpur, but recruitment also improved in Bengal proper. Madras appears for the first time as a recognised source from which labourers can be legally drawn, the provision of the Inland Emigration Act having been brought into operation in the Ganjam district. Assam.

The most striking feature in the years' report is the continued development of free emigration. The mortality on the Dhabri route leading to the tea-gardens of the Assam Valley was heavy owing to an outbreak of cholera, which prevailed during the recruiting season. On the Gorlundo route which leads both to the Assam Valley and to the Surma Valley, the mortality was normal, while in Cachar there were fewer deaths than usual. Complaints of kidnapping and fraudulent recruitment were in all cases carefully investigated, and the proportion of charges found to be true was again insignificant. The contracts executed at the Dhubri depôt were, as usual, for the most part for the full term of 5 years ; those entered into at the gardens, which, so far as the Assam Valley is concerned, are mainly renewals, were generally for terms not exceeding 3 years.

The labour force rose during the year from 437,303 to 461,647. The conduct of the labourers was neither better nor worse than usual, but the number of desertions was unusually large amongst both Act and non-Act labourers. It is found that the unhealthiness of particular gardens is the most frequent cause of desertion. The death-rate for the year was abnormally high, owing partly to cholera and influenza, but also, and perhaps mainly, to the influx of a larger number of new coolies, many of whom were of poor physique. 143 gardens were classed as unhealthy, as against 89 in the previous year, and a special agency for the inspection of gardens and enforcement of sanitary rules was created.

Neither emigration from, nor immigration into, Burma presented any special features. There was a slight increase in the figures of 1892 as compared with the previous year. Burma.

## XIV.

## TRADE AND MANUFACTURES.

*(Detailed information regarding the Trade of British India being annually furnished in a separate Parliamentary Paper, a brief Review only is given in the present Chapter.)*

TRADE.

### TRADE

THE total trade of British India with other countries by sea and land during the five years ending on the 31st March, 1893, was valued as follows :—

| | Tens of Rupees. | | | | |
|---|---|---|---|---|---|
| BY SEA. | 1888-89. | 1889-90. | 1890-91. | 1891-92. | 1892-93. |
| Private Imports : | | | | | |
| Merchandise - - | 66,570,318 | 66,560,121 | 69,034,900 | 66,587,457 | 62,605,030 |
| Treasure - - | 13,844,960 | 17,459,301 | 21,919,486 | 14,722,662 | 17,009,810 |
| | 80,415,278 | 84,019,422 | 90,954,386 | 81,310,119 | 79,614,840 |
| Private Exports : | | | | | |
| Merchandise - - | 96,978,171 | 103,396,862 | 100,135,722 | 108,036,010 | 106,535,997 |
| Treasure - - | 1,703,497 | 1,841,920 | 2,071,906 | 3,143,186 | 6,928,994 |
| | 98,681,668 | 105,238,782 | 102,207,628 | 181,179,196 | 113,464,991 |
| Government Transactions : | | | | | |
| Imports { Stores | 2,870,149 | 2,637,368 | 2,940,470 | 2,844,926 | 3,660,247 |
| Imports { Treasure | 0 | 200 | 15,000 | 0 | 0 |
| Exports { Stores | 71,361 | 63,536 | 91,626 | 137,582 | 59,479 |
| Exports { Treasure | 80,850 | 64,402 | 51,272 | 143,500 | 29,929 |
| | 3,022,360 | 2,765,506 | 3,098,368 | 3,126,008 | 3,749,655 |
| TOTAL Trade by Sea | 182,119,306 | 192,023,710 | 196,260,382 | 195,615,323 | 196,829,486 |
| BY LAND : | | | | | |
| Imports - - | 4,226,145 | 3 793,701 | 4,025,305 | 4,249,592 | 3,895,389 |
| Exports - - | 4,696,702 | 9,210,625 | 4,642,478 | 4,067,644 | 3,594,690 |
| GRAND TOTAL - | 191,042,153 | 201,028,036 | 204,928,165 | 203,932,559 | 204,319,566 |
| Excess imports of treasure - - | 12,060,613 | 15,553,179 | 19,811,308 | 11,435,976 | 10,050,187 |
| Net excess of exports over imports of merchandise, Government transactions, and treasure - - - | 16,019,009 | 20,126,654 | 9,057,843 | 27,123,285 | 29,978,613 |
| India Council Bills paid in India - - | 22,011,453 | 22,609,765 | 19,090,630 | 23,248,600 | 26,977,500 |

India's trade has thus made practically no advance during the last three years. During the past five years the total increase in value has been under 8 per cent., as against 19½, 22, and 25¾ per cent. in the three preceding quinquennial periods. The stationary character of India's trade is ascribed partly to the depression of trade in Europe, and partly to the further sharp fall in the gold value of the rupee, from an average of 1*s.* 6*d.* in 1890-91 to an average of 1*s.* 4¾*d.* in 1891-92, and of less than 1*s.* 3*d.* in 1892-93. During the last year there was a decline in either quantity or value, or in both, under all the more important staples of the import trade, and in wheat, rice, tea, opium, hides, and linseed among the chief export staples; there was some increase in exports under the heads of jute, indigo, rape seed, til seed, and teak. TRADE.

Salt importations decreased by 14,000 tons, or more than 3 per cent.; owing to increased cheapness of inland transport, local salts undersold the imported article, and the total consumption of salt in India continued to increase. The imports of sugar were 12,000 tons less than in 1891–92, and 50,000 tons less than in 1890-91. The importations of metals and hardware decreased under almost every head; imports of iron are now no larger (175,000 tons) than they were ten years ago; imports of steel, though below the total of 1891–92, are more than double the figure for 1883–84. The proportion of iron that India takes from Germany and Belgium is increasing considerably in comparison with the imports from the United Kingdom. Imports of cotton twist and yarn fell by 24 per cent. during the year; and imports of cotton fabrics fell by 4 per cent.; but stocks were low at the end of March 1893, and a greatly increased quantity of cotton goods was imported in the latter half of 1893. Petroleum was the only important item of the imports that showed a large increase—namely, 16 per cent. (or nine million gallons) over the previous year; of Russian petroleum, which came to India for the first time in 1884, there were imported 38 million gallons, against 26 million gallons from America. The output of Burma and Assam petroleum is also increasing; while the importations of foreign petroleum have doubled since an import duty was imposed on the commodity in the year 1888.

The export trade showed a considerable fall in the quantity and value of the rice trade, but the largest decrease was under the head of wheat, of which the exports were 749,000 tons, against 1,501,000 tons in 1890–91, when the failure of food crops in Eastern Europe caused an unusually strong demand for Indian wheat. Tea exports declined by nearly 2 per cent. in quantity, but increased by more than 5 per cent. in value. England now imports from India and Ceylon together more than three times as much tea as she takes from China. Opium exports declined 8 per cent. in quantity and 3 per cent. in value. Indigo exports advanced one per cent. in quantity and 29 per cent. in value. Exports of raw cotton increased 8 per cent. in quantity and 20 per cent. in value over the very low figures of 1891–92, the smallest for ten years; but the total value, 12¾ millions, was still far below 16 millions, the average value of India's cotton exports during the four years, 1887-91. Exports of raw jute advanced 23 per cent. in quantity and 16 per cent. in value. The trade in seeds fell off 17 per cent. in quantity, in consequence of a partial failure of the crop in both Eastern and Western India; but the value decreased by only 5 per cent. There was an increase of 17 per cent. in the quantity and in the value of Indian yarn exported; more than 92 per cent. of this trade goes to China; the despatches of Indian yarn to Japan have decreased, while the export of raw cotton has greatly increased during the last two years, in consequence of the establishment of cotton factories in that country. Exports of jute bags and jute cloth increased 28 per cent.

The values of the chief staples of import and export during the year 1892–93 were:—

TRADE.

| VALUE OF IMPORTS. | Tens of rupees. | VALUE OF EXPORTS. | Tens of rupees. |
|---|---|---|---|
| Cotton woven goods | 22,942,000 | Raw cotton | 12,743,000 |
| Metals and hardware | 6,599,000 | Rice | 12,259,000 |
| Oils, chiefly petroleum | 2,919,000 | Oilseeds | 11,631,000 |
| Silk, raw and manufactured | 2,817,000 | Jute, raw and woven | 11,182,000 |
| Cotton yarns | 2,683,000 | Opium | 9,255,000 |
| Sugar | 2,625,000 | Wheat | 7,440,000 |
| Machinery and mill work | 2,359,000 | *Cotton yarns | 6,773,000 |
| Provisions | 1,862,000 | Tea | 6,292,000 |
| Chemicals, medicines, dyes | 1,615,000 | Hides and skins | 6,591,000 |
| Woollen goods | 1,523,000 | Indigo | 4,141,000 |
| Liquors (alcoholic, including beer) | 1,447,000 | Coffee | 2,066,000 |
| Apparel | 1,383,000 | *Cotton woven goods | 1,327,000 |
| Total, including minor items | 62,605,030 | Total, including minor items | 106,535,000 |

* *Note.*—The figures given here are exclusive of re-exports of foreign goods.

Among the maritime Provinces of India the Bombay Presidency had 38·86 per cent. of the foreign trade in merchandise, Bengal had 38·34 per cent., Madras had 9·68 per cent., Burma had 8·66 per cent., and Sindh had 4·46 per cent. The proportion pertaining to Sindh and Bombay is smaller than in the preceding year by reason of the great decrease in wheat exports. Among the chief seaports Bombay had 44·68 per cent., Calcutta 34·43 per cent., Rangoon 6·51 per cent., Madras 4·77 per cent., and Karachi 4·01 per cent. of India's total foreign trade in merchandise and treasure. The greater part of the trade in treasure belongs to Bombay; in merchandise, Bombay and Calcutta are more nearly equal, the former showing 65¾ millions and the latter 63¾ millions as the total value of their export and import trade.

One feature in India's trade during 1892–93 remains to be noticed. For the past 33 years India has absorbed yearly vast quantities of gold and silver bullion; during the whole period gold to the value of Rx. 126,000,000 and silver to the value of Rx. 260,500,000 have been imported into, and retained in, India. In every year since 1859, except 1878–79, the gold imports exceeded the gold exports by a large sum; and the average net imports of gold during the past 13 years were Rx. 3,750,000. But in the year 1892-93 the flow of gold was the other way; and India's net exports of that metal were valued at Rx. 2,812,682, against a net import of Rx. 4,594,472 in 1891-92, and large net imports in every other year, reaching in 1864–65 as high as Rx. 9,839,964. This unusual export of gold from India was due mainly to the high silver price of gold in the markets of the world. The net importations of silver during the year were Rx. 12,894,498, against Rx. 9,175,684 in the year 1891–92 and Rx. 14,211,407 in the year 1890–91.

## MANUFACTURES.

MANUFACTURES. General.

The domestic industries of India, such as weaving and spinning, pottery, brass-work, iron-work, and art work of many kinds, continue to be practised after ancient methods all over the continent of India. But Indian fabrics and products, made on a small scale by workers at their homes, have for years past been giving way before the cheaper cotton yarn and fabrics, and the iron or steel products, of British factories. Meanwhile, without any protection, favour, or advantage, other than is afforded by cheap Indian labour, and by the production

production of raw materials in India, an important manufacturing industry has been growing up, and steam-power factories are at work, among which those for spinning and weaving cotton, for spinning and weaving jute, for making paper, for husking and cleaning rice, for sawing timber, and for brewing beer, are the most important. Steam power is also largely employed in factories on tea gardens and indigo estates. There were at the end of the year 1892-93, 130 cotton mills worked by steam, of which five were opened during the year; of these, 88 were in the Bombay Presidency; and the whole represented a nominal capital of more than Rx. 12,000,000. These cotton mills employ over 121,000 hands. They contained 26,317 looms and 3,378,303 spindles. MANUFACTURES.

The number of jute mills increased during the year from 26 to 27; all but two are in Bengal. The nominal capital of these mills is about Rx. 3,500,000. They employ 62,000 hands, on 8,101 looms and 161,845 spindles.

Fifty-eight rice mills, for husking and cleaning rice, and 69 saw mills, most of which were in Burma, employed about 38,000 hands; the amount of white, or fully cleaned rice, produced by the rice mills continues to increase, while the proportion of cargo or half-cleaned rice exported decreases. The produce of the paper mills, of which there were four in the Bombay Presidency, and four in other parts of India, had increased in value to Rx. 328,000, against Rx. 289,000 in 1889. There were 21 breweries at work, which produced during the year 4,831,000 gallons of beer and porter, or 300,000 gallons less than they yielded three years before. The Commissariat Department, which bought, during 1888, 4,628,000 gallons of this malt liquor, purchased in 1892 only 2,748,000 gallons for the use of European soldiers.

Among other "large industries," which are shown in the Indian Returns for 1892, may be mentioned:—

| | | | |
|---|---|---|---|
| Woollen mills | 5 | Cutch and lac factories | 84 |
| Silk mills | 8 | Oil mills and factories | 89 |
| Soap factories | 2 | Flour mills | 146 |
| Tanneries | 46 | Ice factories | 32 |
| Iron and brass foundries | 78 | Pottery and tile factories | 21 |
| Sugar factories (large) | 12 | Bone-crushing factories | 15 |
| Coffee works | 31 | Tobacco and cigar factories | 46 |
| Cotton and jute presses | 401 | Silk filatures | 75 |
| Cotton and woollen factories not classed as mills | 14 | | |

Bengal contains jute mills, cotton mills, paper mills, collieries, the only large iron works, and the largest pottery factory in India, besides factories for lac, sugar, rope, indigo, and saltpetre, tanneries, and foundries. Th eproduction of cotton stuffs by domestic looms in Western Bengal is said to have increased in consequence of the rise in the exchange value of the rupee. The year was favourable for the jute mills, for the silk industry in Central and Northern Bengal, for saltpetre works in Behar, and for tobacco. But the season was unfavourable for sugar and for indigo. The output of the mica mines in Chota Nagpore and Gaya showed a considerable increase over the previous year, as did also the yield of the collieries. Bengal.

Among native industries in the North West Provinces, brass-work, stone-quarrying and stone-carving, and weaving, are the most important; but these provinces, which contain more large cities than any part of India, possess a great number of flourishing arts and crafts. Of large industries besides indigo, there are five cotton mills, one woollen mill, and one paper mill. North West Provinces.

In the Punjab there are few large industries. As has been mentioned in previous Statements, the Punjab Government publishes every year a monograph on some one of the principal industries of the province. The monographs of the three preceding years were upon the brass and copper industries, upon work in gold and silver, and upon the fibrous plants of the Punjab other than cotton. In 1891-92 the subject was leather industry. Punjab.

There are in the Punjab two great castes of leather workers, the Chamárs who number nearly 900,000, and are mostly Hindus; and the Mochis, who number more than 375,000, and are mostly Mohamadans. A large but decreasing section of these castes is made up of village servants who, for fixed payments in grain,

Manufactures.

sugar cane-juice, or cotton, and fees on the occasion of marriages, make and repair the shoes, whips, thongs, plough-gear and head-stalls for cattle that are required by the members of the village community, and eke out their allowance by doing general agricultural and household work. The system of customary allowances, however, is fast giving way in villages to that of cash payments, which is universal in towns.

The village workers are thus losing their hereditary incomes, and it is unlikely that their rough products will be able to compete even locally with the finished work of large tanneries and factories such as those of Cawnpore. Besides the ordinary leather workers there are separate classes of makers of leather jars from camel skins, shagreen manufacturers, general tanners, tanners of goat and sheep skins, tanners of bulls' and buffalo hides, who also prepare gut for the strings of musical instruments, and wholesale hide and skin merchants. The import of hides and skins and the export of leather make up a foreign trade, chiefly with Kashmir and Kabul, of the total value in 1891–92 of nearly 7½ lakhs. The trade of the Punjab with the rest of India in hides, skins, and manufactured leather was of the total value in 1891–92 of 66½ lakhs. But, as each village has its own leather workers who procure their raw materials and manufacture on the spot, these figures give an inadequate idea of the activity of the industry.

The skins chiefly used are those of the buffalo, bull, sheep, goat, camel, and donkey. From the first two kinds is prepared leather for boots, saddles, harness, and less important manufactured articles, such as hookahs. From goatskin and sheepskin are made uppers for boots, box-covers, bellows, gaiters, bindings for books. Camel skin is used for jars, drums, and ropes, shagreen for the uppers of shoes and for bookbinding. Leather of a finer quality is made at Nurpur, and in very small quantities for upholstering at Gujrat. The ornamental leather-work of Bilaspur is used for waistbelts, inkstands, glove-boxes, cigar-cases, and horse trappings. Trunks and portmanteaus are the only other articles of European use produced.

Burma.

The large industries of Burma are 51 rice mills, 49 saw mills, and six cutch factories. Among the more important local and indigenous industries are boat-building, weaving, pottery, gold and silver work, wood-carving, cigar-making, *ngapi* or fish-curing, pottery, lacquer-work, brass-work, and marble-work. The boats plying on the Irrawaddy and other rivers sometimes are as large as 100 to 150 tons burden, while many thousands of smaller craft carry paddy and other goods on the creeks and rivers, pursue fishing along the coasts, and engage in coasting trade from Chittagong down to Penang. Weaving of cotton, silk, and embroidered goods is carried on by Burmese women in every town and village, and this domestic industry has, as yet, not succumbed to the competition of machine-made goods. The pottery of Burma, though not specially artistic, is yet strong and durable; and the great Pegu jars are much valued up and down the coast, as well as inland. The gold and silver work of Burma are much appreciated, not only by the people, who are much given to ornaments of this kind, but by European customers. Wood-carving is an art much cultivated, and is largely employed in the ornamentation of monasteries and private houses, most of which are built of wood, as well as in the adornment of the river craft. Cigar-making is carried on largely by women for home consumption and for export; most of the tobacco used in the Burmese cigars comes from continental India. The curing of salt fish and the making of fish paste meets a very large local demand, for nearly every Burman family that can afford it eats *ngapi* (fish-paste) with one or more meals daily; *ngapi* is given with the daily meal to prisoners in Burma jails; and the total production of salt fish, dried fish, and *ngapi* in Burma is believed to exceed half a million sterling in value. Lacquer-work is an important industry in Prome and Pagan; gums or oils from certain of the Burma forest trees are used in the manufacture, the basis of the lacquered articles being usually fine bamboo basket-work.

Central Provinces.

The large industries of the Central Provinces are five cotton mills, of which one was established in January 1892 and one in August 1892. They contain 876 looms and 87,944 spindles, and employ 5,348 persons, of whom 3,756 are adult males; the amount of cotton consumed in these mills during the year was 116,951 cwts. The usual domestic industries are practised in the Central

Central Provinces; but there has been of late years much decay of the embroidered and stout cotton cloth home industry for which the Nagpur country used to be celebrated. MANUFACTURES.

The production of tea continues to be first industry of Assam; the area under tea plants increased to 247,192 acres, or 5,369 more than in the preceding year; the average out-turn of the year fell from 434 to 394 lbs. per acre by reason of the unfavourable season; but an advance of price more than made up for the short crop. The number of persons working on tea-gardens in Assam is returned at 830,735 permanently employed, and 115,760 temporarily, against 766,821 and 103,603 in the preceding year; the number of immigrant labourers under inspection according to the Assam Labour Act was, at the end of 1892, 461,647, of whom 56,050 immigrated during the year; the death-rate among immigrant labourers rose from 37 to 42 per mille during the year; the increase is attributed to epidemics of cholera and influenza and to the poor physique of the new immigrants who were unusually numerous. The relations between employers and labourers are said to have been "on the whole satisfactory." The land held direct from the State by time-expired immigrant labourers rose from 36,467 to 40,510 acres; the coolies also cultivate considerable areas with rice and vegetables within the limits of nearly all tea-gardens. Assam.

The only other important manufactures of Assam are fabrics of *muga* and *eri* silk; the spinning and weaving of these silks are cottage industries; the fabrics are largely worn and used by wealthy natives and by Europeans in Assam; the total production is said to be as large as in the best days of the native dynasties, while the price is fourfold what it was 50 years ago. From Sylhet shell bracelets and a perfume distilled from the sap of the agar-tree (*aquillaria agallocha*) are exported and are highly valued outside the province. The pottery, brass-work, silver-work, and cotton stuffs made in Assam are of no merit, and cannot compete with similar articles from other parts of India.

Weaving continues to be the most important domestic industry in Madras, though it is declining under the competition of machine-made goods. Eleven cotton mills in the Presidency worked up 263,000 cwts. of raw cotton; these mills, and one mill for weaving hempen bags, employed 9,600 hands. Eight minor weaving establishments were maintained on the east coast; and there were 42 cotton presses in the Presidency. Thirty coffee-curing works turned out Rx. 969,000 worth of cured coffee. The tanneries of Madras, Madura, Bellary and Vizagapatam continued to turn out large quantities of excellent leather, inferior to none in India except the best Cawnpore products. Factories at Madras and in Malabar sold Rx. 40,000 worth of tiles and cement. The cigar factories of the Godavari and the southern districts are reported to have made 55 millions of cigars, valued at Rx. 55,000. Indigo is made on a small scale and of inferior quality at some hundreds of vats, and was exported to the value of Rx. 1,144,000 against Rx. 445,169 in the previous year. Sugar was made on a large scale at one factory on the east coast, at which also considerable quantities of rum were distilled. Madras.

In the Bombay Presidency there were 253 steam factories at work at the end of 1892, of which 116 belonged to the city of Bombay; at these factories 118,000 hands were employed. The spinning and weaving mills were 96 in number, and turned out 320 million pounds of yarn and woven goods in the year. Besides the workshops belonging to the railways and the great steamship companies, 20 factories in Bombay turn out ironwork of all kinds, from railway girders to nails and nuts. Among other large factories using steam are four dye-works, which sold during the year Rx. 300,000 worth of coloured goods; two woollen-weaving mills and six wool-cleaning mills; cotton ginning and cleaning mills; four saw mills; five paper mills, one of which is large and successful; seven bone-crushing mills; three rice-cleaning mills; 27 flour mills, producing 220 million pounds of flour in the year; and 11 mills for pressing oil. Bombay.

Of the domestic industries and manufactures conducted after native methods, the chief are hand loom weaving and cotton spinning, which supply the hand-woven goods still worn by the majority of the lower classes; calico dyeing and printing, gold and silver lacemaking, the making of silk, and of garment pieces partly of silk for women's wear, the weaving of cotton and woollen carpets; brocade work, and embroidery of gold and silver, for which Guzerat, Nasik, and Sind workmen are specially renowned; woodcarving, the art speciality of Guzerat;

MANUFACTURES. Guzerat; and sculpture, which is practised in Cutch and Kathiawar; in these three provinces also silver work is done of a special kind and of much excellence. In all parts oil for domestic use, for soapmaking, for lubricating machinery, and for lamps is expressed by labour of cattle and men from castor-beans, sesame, rape-seed, poppy-seed, mhaura (or mhowa) nuts, linseed, ground-nuts, and cocoa-nuts. The local demand for vegetable oil is said in some places to have decreased in consequence of the extending use of petroleum, but the price of oil-seeds does not appear to have fallen.

Berar. The only large manufactory in Berar is the steam mill at Badnera, where yarn and cotton cloth are manufactured. It produced 995,862 lbs. of twist and yarn, against 999,683 lbs., and 912,217 lbs. of cloth, against 918,734 lbs., in the preceding year. The number of persons employed in this factory was 770, or 155 less than in the previous year. The steam cotton presses and the ginning factories are the most important industries in the province; and of these there were 86 at work during the year; the number of ginning factories increased from 48 to 58. The oil press, attached to one of the cotton presses at Amraoti, turned out 13,205 tons of oil and 1,143 tons of oil-cake, and that at Shegaon 77,059 gallons of oil and 706 tons of oil-cake. The domestic industries of Berar are the weaving of silk, cotton pieces with embroidered borders, cotton carpets, coarse cotton cloth and garment pieces, turbans and blankets; there was no marked change in the working of these crafts.

## FACTORY ACT.

FACTORY ACT. The new Indian Factory Act came into force on the 1st January 1892. The changes introduced into the law were, briefly:—

the law could be applied to establishments employing 20 hands or over, instead of only to those with 50 hands or over;

the minimum age for child labourers was raised from seven to nine years, and the maximum age from 12 to 14 years;

the maximum hours for child labour in any one day were reduced from nine hours to seven hours;

the hours of labour for women workers, which were unrestricted under the Indian Factory Act of 1881, were limited by the Act of 1891 to 11 hours a day;

hours of rest during labour were prescribed for all labourers, namely, half an hour in the middle of the day for all hands; and one hour interval for women workers.

The reports of factory inspectors show the number of factories inspected, and the results of the inspections to have been as follows:—

### STATISTICS OF FACTORIES IN INDIA, INSPECTED UNDER THE FACTORY ACT DURING THE YEAR 1892.

| PROVINCE. | Number of Factories liable to be inspected. | Number of Inspections in the year. | Average Number of Hands employed daily. | | | | Factories where Weekly Holiday on | | Number of Factories Working | | Number of Persons convicted of breach of Act. | Number of Accidents Reported. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Men. | Women. | Children. | Total. | Sunday. | Other Days. | With Shifts. | Mid-day Stoppage. | | Fatal. | Serious. | Minor. | Total. |
| Bengal | 150 | 373 | 94,985 | 15,774 | 9,248 | 120,007 | 95 | 4 | 72 | 72 | 4 | 7 | 171 | 160 | 338 |
| N. W. Province and Oudh. | 47 | 86 | 16,531 | 615 | 1,125 | 18,371 | 52 | 32 | 15 | 32 | – | 4 | 24 | 50 | 78 |
| Punjab | 35 | 30 | 6,290 | 289 | 159 | 6,738 | 25 | 7 | 24 | 17 | – | 2 | 6 | 12 | 20 |
| Burma | 106 | 338 | 20,335 | 588 | 213 | 21,136 | 10 | 4 | 46 | 60 | – | 1 | 10 | 4 | 15 |
| Central Province | 16 | 24 | 6,217 | 1,232 | 772 | 8,221 | 7 | 7 | 6 | 9 | 1 | 1 | 11 | 44 | 56 |
| Madras | 46 | 264 | 20,198 | 2,250 | 1,424 | 23,872 | 41 | 1 | 1 | 39 | – | 3 | 17 | 111 | 131 |
| Bombay | 253 | 798 | 89,680 | 22,844 | 5,946 | 118,470 | 251 | | 57 | 195 | 1 | 13 | 79 | 639 | 731 |
| TOTAL | 653 | 1,913 | 254,236 | 43,592 | 18,887 | 316,815 | 536 | | 221 | 424 | 1 | 31 | 318 | 1,020 | 1,369 |

The largest number of factories is in the Bombay Presidency, and 119 are in Bombay city alone. It is said that the new Factory Act has been generally carried out with readiness everywhere; the restrictions on the employment of women and children, and the enforcement of the weekly holiday and midday stoppage, do not appear to have affected the factory industry adversely. Only one factory, the Bombay Gasworks, was exempted from the rule as to Sunday work. The usual holiday is Sunday, except in Khandesh, where the local market day is generally the holiday. Ventilation and fencing of machinery are said to be satisfactory everywhere. The sanitary conditions and surroundings of factories are improving. Most of the hands belong to the agricultural classes; and they pass to and fro between mill work and field work. Cotton presses usually work for a part of the year only. The intermittent character of factory work, as it now exists, contributes to keep the hands in good health. FACTORY ACT.

In Bengal, factories work by shifts more commonly than in Bombay. Generally speaking, the factories are lofty buildings, well lighted and well ventilated; the water supply and sanitary arrangements are generally good; the general health of the hands was found by the medical inspectors to be good, and from one district it was reported that factory operatives suffered less from small-pox and cholera than their neighbours. The large factories are more careful to obey the law and to act upon the Inspector's warnings than the small ones. Fencing of machinery is generally satisfactory. The ice factories, the jute presses, and other factories, to the number of 51 in all, were exempted from those provisions of the law which require a Sunday (or other) holiday in the week.

In Madras the new Act is said to have worked without friction, and not to have resulted in any general dismissal of women and children from employment. The sanitary arrangements and conditions of the factories were found to be generally satisfactory, and any sanitary improvements suggested by Inspectors were usually carried out at once by the managers. No exemption from the law requiring the Sunday (or other weekly) holiday was granted. In every case except one the Inspectors reported most favourably upon the physical condition of the operatives.

Thirteen of the factories in the North West Provinces were not inspected during the year. Two Government factories at Cawnpore and one sugar factory were exempted from the Sunday holiday law. The fencing of machinery is reported to be satisfactory, and serious accidents are due usually to gross carelessness on the part of the hands. The health of the children operatives is reported to be not so good as in Bengal, and the medical officers have been directed to direct special attention to this matter.

In Burma the defects brought to light by the Inspectors concerned mostly the fencing of machinery and sanitary improvements; such defects were promptly remedied on being pointed out by the Inspectors. The general health of the operatives was good, and no epidemic occurred among them during the year. Three factories were exempted from the Sunday holiday law, and orders were issued bringing under the Act some 40 more rice mills and saw mills that employed fewer than 50 hands apiece.

The factories in the Central Provinces were visited by the Bombay Inspector. The chief shortcoming found was lack of ventilation in factory buildings. In two Nimar factories the law regarding weekly holidays was transgressed. The general health of the operatives was good, and the child workers were found to be in good health and not suffering from the nature of their work. Defects in fencing machinery and mill gearing were promptly remedied when pointed out. Two factories were exempted from the Sunday holiday rule.

## CHAPTER XV.

## THE FRONTIERS AND PROTECTED STATES OF INDIA.

The Frontiers and Protected States of India.

THE following notices for the year 1892-93 should be read in continuation of the corresponding paragraphs in the Decennial Report for 1891-92.

Excluding Afghanistan and Nipal, and also Kiangton and one or two other States subordinate to the Chief Commissioner of Burma, of which the area, population, and revenue are not estimated, the total area, population, and approximate revenue of the States dealt with in this section, may be stated at 793,000 square miles, 67,275,000, and Rx. 20,500,000 respectively.

Imperial Service Troops.

During the year the strength of the Imperial Service Troops was increased by the addition of two cavalry regiments, in the organisation of which considerable progress was made. The total strength of 18,500 is distributed over 60½ squadrons of cavalry, 13½ regiments of infantry, a camel corps, two companies of sappers' transport corps consisting of 600 carts and 1,500 ponies, and two mountain batteries. Their efficiency was thus described by Lord Roberts shortly before his departure from India: "During the past cold "weather," he said publicly in Jodhpur, "I have inspected the majority of "the Imperial Service Corps in the North of India. . . . I may say that their "present efficient condition exceeds my most sanguine expectations. The "troops are well dressed, well turned out, and, as regards the cavalry, as well "mounted as could be expected. The officers take a keen interest in their "work, and spare no pains to perfect themselves in their duty. The drill has "reached a higher standard than I believed to have been possible in the time. "The regiments have constantly been brigaded with our own troops during this "cold weather, and the officers under whom they have worked are unanimous "in their praises of the manner in which duty has been performed. The "discipline too has been admirable; I have not heard of a single case of crime; "the camps have been well pitched; sanitation has been invariably attended to, "while the men have throughout been animated by an excellent spirit. The "remarkable success which has attended the scheme under which either troops "or transport have been provided by the native States for the defence of India "must, in my opinion, be attributed to the loyalty and enthusiasm of the rulers of "the States in question. In no other way could such results have been attained."

Afghanistan.

A mission under Lord Roberts to Afghanistan was in contemplation in the year under review, but His Highness the Amir was unable to make arrangements for the meeting. The matters which it was intended to discuss and which have since been satisfactorily settled by Sir Henry Durand's Mission in the autumn of 1893, mainly concerned the frontiers and intervening tracts between the territories of the Governments of India and Afghanistan. A general uncertainty prevailed as to the limits of influence of the two governments, and the tribesmen constantly took advantage of this uncertainty, playing off the one against the other. In Chitral, apprehension of aggression under cover of Afghan protection stood in the way of any settled government. The people of Bajaur and Swat were in uncertainty whether they might not any day be exposed to an Afghan invasion. There was anarchy in Kurram, where the Turis were kept in fear by local disturbances fomented by Afghan officials and by raids carried on by Afghan subjects. And, south of Kurram, the whole Waziri tribe was in a state of ferment, and outrages were frequent in the Zhob and Gomal valleys. Altogether the situation was strained and disquieting during the year under review. By the recent arrangement with His Highness the Amir, the causes of this unrest on the frontier have disappeared. The actual terms of the settlement may be left to next year's report.

Baluchistan.

In Baluchistan the most important event in its consequences was the murder by His Highness Mir Khudadad Khan, then Khan of Kalat, of his Mustaufi, or Minister, Fakir Muhammad. This murder, which the political agent, on hearing of the Mustaufi's arrest, had tried in vain to prevent, was the culminating act of a long course of oppression. An investigation into the conduct of the Khan left no doubt of his guilt and of his frequent abuse of power from motives of cruelty and avarice. The chief Sardars of the Baluch confederacy, of which the Khan is head, joined in expressing their disgust at his conduct, and petitioned the British Government to replace him by his son,

Mir

Mir Mahmud Khan. The Khan himself tendered the resignation of the chiefship, and, in consideration of his loyalty in the past, the Government of India decided to be content with accepting his abdication, and investing Mir Mahmud Khan with the vacant chiefship. This decision was carried out in 1893–94. THE FRONTIERS AND PROTECTED STATES OF INDIA.

Another event of importance in the year's administration was the withdrawal from Mekran. In 1890–91, Sir Robert Sandeman, then Governor General's Agent, visited Southern Baluchistan, including Mekran and the Kej and Panjgur districts, and found the country in a state of almost complete anarchy; an officer and some troops were left on the spot, and efforts were made to secure a durable settlement among the rival parties and clans. These efforts met with only partial success, and the Government of India, being unwilling at the time to take upon itself the responsibility of the administration of this distant and poor country, decided to withdraw its troops and civil establishments. Fresh proposals for the administration of Mekran are now under consideration in consultation with the new Khan of Kalat.

Affairs in Mekran so engrossed the political agent of Southern Baluchistan that he could not properly attend to the duties of his charge in the direction of Sind, where the tribes were giving trouble. The political charge of the Las Beyla State was for this reason temporarily transferred to the political agent at Kalat. A severe epidemic of cholera occurred during the year, in which from 2,000 to 2,500 persons are estimated to have died in the Kej and Panjgur districts.

In the Zhob valley the action of the Afghan officials on the frontier caused some excitement, and serious offences by the Waziris were consequently numerous. Progress was made in the organisation of the Zhob levies.

An important financial reform was effected at the close of the year by the substitution of a single provincial contract between the Government of India and the Governor General's Agent in Baluchistan, for the four separate contracts previously in force; viz.:—(1) the special allotment of police and levies; (2) the Zhob revenues; (3) the Quetta revenues; and (4) the grant for the Zhob Levy Corps. There was a satisfactory increase of provincial revenues, which were approximately, in 1892–93, Rx. 59,077, as compared with Rx. 43,163 in 1890–91 and Rx. 54,220 in 1891–92.

Improvements have been effected in various departments; education is said to be making rapid strides; the annual horse-show at Sibi has proved a great success; the rapidity with which unreserved forests have disappeared has necessitated the extension of reserved areas for the maintenance of a supply of fuel and fodder in the province; a larger quantity of coal was obtained, and proposals were under consideration for the further exploitation of the coal fields of Baluchistan. The attempts to obtain a permanent and remunerative supply of petroleum have failed. Trade declined during the year.

On the Punjab border the principal event was the occupation of Kurram, which was undertaken with the assent, or rather at the suggestion, of the Amir. The Turis were replaced in possession of their lands from which they had been ejected by the freebooter Chikkai and his followers. Peace and order were established, a military cantonment laid out, and a local militia force, 850 strong, enlisted. In the Khaibar, trouble was caused by the rebellion of Amin Khan, the representative headman of the Kuki Khel Afridis. As a punishment his allowance was forfeited and fines were imposed on his tribe. On the Hazara border a small expedition was necessary to obtain the expulsion of Hashim Ali, the proscribed chief of the Khan Khel Hassanzai. There was no opposition, Hashim Ali fled, and the small hamlet of Baio, in which he had for the time established himself, was destroyed. Further north the Gilgit field force came into collision with the Chilasis; but on the Panjab frontier itself no actual fighting took place. On the whole, on both the Derajat and the Peshawar sections of the Punjab frontier, there were many signs of improvement in the behaviour of the tribes. This improvement is likely to continue and to extend, now that the settlement with the Amir has done away with the main causes of uncertainty and unrest. Punjab Frontier Tribes.

Reference has already been made to the collision at Chilas between the Gilgit field force and the insurgent Shinaki tribes. The opening of the Khagan route from the Hazara district, *viâ* the Babusar pass, to Chilas was decided upon and carried out after the close of 1892–93. Kashmir, and its

Beside the occupation of Chilas, the principal events of the year in Kashmir were the severe outbreak of cholera, of which nearly 12,000 persons died in the valley

THE FRONTIERS AND PROTECTED STATES OF INDIA.

valley between May and August, and the destruction by fire of one of the most thickly populated portions of the city of Soinagar. Considerable efforts were made by the State Council to remedy the consequent distress; the work of the medical department was particularly satisfactory. A scheme for providing the capital with a pure water supply was taken in hand during the year. The chief difficulty of Kashmir administration is financial. The expenditure of the year, Rx. 610,201, exceeded the revenue by Rx. 98,900, and the surplus treasury balances of the State were nearly exhausted. A very large proportion of the revenues is absorbed by the Military and Public Works Departments, in both of which more outlay is urgently required, *i.e.*, for completing the equipment of the troops, and for constructing necessary roads and buildings. The revenue administration was conducted with ability. Progress was made in the new settlement of land revenue, which is being carried out under the superintendence of a British officer. Arrears, mostly irrecoverable, amounting to Rx. 237,000, were remitted. The Government of India undertook the working of the telegraph lines, with the exception of one section; and bore three-fourths of the cost of provisioning the Gilgit Field Force. Some progress is reported in the matter of education; and the administration of the jails, and of the judicial and police department is described as having been fairly satisfactory.

Nipal, Sikkim, and Bhutan.

The affairs of Sikkim and the political relations with Nipal and Bhutan call for no special remark.

Manipur and Assam Border.

In Manipur, the minor, Chura Chand, who had been chosen to fill the chiefship was installed in April 1892, on which occasion the *sanad* of the Governor General was presented to him, declaring expressly that he derived his right from the Government of India, and that his retention of it depended on the loyal fulfilment of his duties as a tributary prince. The opportunity was used for abolishing slavery, and the *lalup* system, as it is called, under which the State exacted unpaid labour from its subjects. The place of this form of State-dues was taken by a house-tax at the annual rate of Rs. 2 per house; and a uniform rate of land revenue equal to Rs. 2 per acre was established. The revenue collections during the year amounted to Rx. 21,490, and the expenditure to Rx. 30,204, including Rx. 10,783 on account of arrears and current instalment of indemnity and tribute. There was considerable expenditure on public works, particularly on communications. The Assam—Burma cart-road was pushed on; the section as far as Kohima is expected to be open to traffic by May 1894. Trade is greatly expanding.

Along the external frontier of Assam the relations with the tribes were on the whole satisfactory, and undisturbed by any event requiring special notice. In the North Lushai Hills, however, some of the tribes rose and attacked a British force, but were repulsed. The chief villages of the assailants were occupied and destroyed by expeditions operating from Fort Aijal.

In January 1892 the question of transferring the South Lushai Hills from Bengal and portions of the Arakan Hill Tracts from Burma to the administration of Assam was under consideration, but it was decided to postpone the transfer for the present. Among the South Lushais, military expeditions were necessary in conjunction with the forces operating from Fort Aijal in North Lushailand. No serious resistance was encountered. Fines were inflicted, the taxes imposed were collected, and the policy of disarmament was more or less effectually carried out.

Chin Hills.

The Chin Hill tracts, which had been previously administered from Fort White and Haka, were in July 1892 brought under a single charge administered from Falam. In these tracts the work of the year was the suppression of the rebellion of the Nwengals and Siyins. Military operations on a considerable scale were required, during which the casualties in the British forces exceeded 70. They were, however, successful; most of the ringleaders of the rebellion were captured, and over 1,600 guns were surrendered. The Chin Hill tribes, excepting the Siyins, the Nwengals, and the Tlantlangs behaved well. A regular cash tribute was collected for the first time at the rate of one rupee per house, and amounted during the year to Rx. 1,200. The general policy of Government in the Chin Hills is thus described:—

(1.) To protect the plains of Burma from raids;

(2.) To interfere as little as possible with the customs of the people and their system of tribal government;

(3.) To prevent bloodshed and internal feuds;

(4.) To

(4.) To advise the chiefs and tribesmen, and to build up a sound primitive form of government;

(5.) To punish severely all crime committed against Government servants and property;

(6.) To demand tribute from all the tribes as a token of their fealty to the British Government.

Kachin Tribes, North East Frontier.

Among the Kachins of the North Eastern frontier military operations on a considerable scale were necessary. The work of previous seasons was extended. Police escorts were despatched in different directions, and posts were permanently established at Sima and Namkham. The opposition was of a serious nature, nor had it been finally crushed by the end of the year under review. West of the Irrawaddy and south of Kamaing the country may be considered as having been permanently pacified. East of the Irrawaddy, posts had before the end of the year been established at Namkham, Nampaung, Sima and Sadon, and the location of another post at Kwitu was in contemplation. With the help of these posts it was expected that order would be preserved. The question of the system of administration required for these Kachin tracts was still under consideration at the close of the year. It is proposed to administer them under a Regulation somewhat similar to the Punjab Frontier Crimes Regulation. The line of frontier between the British and Chinese spheres of influence in the Kachin country was under discussion during the whole year.

Burma Shan States.

Other Kachin disturbances occurred during the year in 1892-93 in the Shan State of North Hsinwi (Thien-ni), where there was a conflict between the races of Kachins and Shans. The former are settling in the State in increased numbers, and have proved less submissive than the Shans to the oppressive rule of the chief. A widespread feeling of exasperation among the Kachin settlers culminated in a successful attack on Hsinwi town in December 1892. The revolt was directed solely against the Shan rulers of the country, and on the arrival of the Superintendent the malcontents laid down their arms when they had received an assurance that their grievances would be inquired into. In the rest of the Shan States peace prevailed, and there was a very satisfactory absence of dacoity and of serious crime. In Hsipaw and South Hsinwi among the Northern States considerable progress was made in the policy of disarmament and in the introduction of more civilised methods of government. The abolition of tolls in the Hsipaw State was also a satisfactory feature of the year's administration. In all the States much information was collected regarding their revenue-paying capacities. Their tributes were generally lightened with a view to leaving the chiefs in a better position to develop the resources of their States. There was a great expansion of trade during the year. Much of the time and attention of the Superintendent and Assistant Superintendent of the Southern Shan States during 1892-93 was occupied in the work of demarcating the frontier with Siam. This work was very satisfactorily completed. The Siamese occupation of the trans-Salween portion of Eastern Karenni was brought to an end in 1892, and an inquiry was held to estimate the losses sustained by Sawlawi, the chief of Eastern Karenni, owing to the Siamese occupation. The trans-Salween State of Kiangton was visited by the Superintendent of the Northern Shan States who helped the Sawbwa and his ministers with advice in various matters; he was also able to obtain information as to the resources of the State.

## INTERNAL STATES.



Dacoity.

The suppression of dacoity in the Native States is often a matter of Imperial concern, and necessitates interference on the part of the paramount power, particularly in those tracts of Native States territory where the jurisdiction of the chiefs is much intermingled, and where the dacoits have, therefore, great advantages in organising their crimes with comparative impunity. For the State of Hyderabad, and the large Agencies of Central India and Rajputana, there has long existed a special department under the Government of India charged with the duty of suppressing thuggee and dacoity. The former crime has been almost stamped out; dacoity, however, prevails, and in the last few years has shown a tendency to increase both in the States referred to and in Kathiawar. The Thuggee and Dacoity Department records 564 cases of dacoity in 1892, as compared with 539 in the previous year, the increase occurring wholly in Central India, where also the value of property stolen per case was

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very much larger. The increase of lawlessness was so serious that special measures had to be taken to deal with it. A special police force and a detachment of the Bhopal battalion were deputed to Bundelkhand, and the whole operations were placed under a selected police officer from the Central Provinces. The operations were entirely successful, and Bundelkhand was freed from dacoits. This result was, however, achieved after the close of the period to which the present Statement relates. One fact which was made evident by these operations was that several important Jaghirdars, and, in some instances, ruling powers in Central India had been in the habit of countenancing and harbouring dacoits. Two other measures may be mentioned in connection with this subject, though neither was completed in 1892-93. One was an amendment of the law of British India, to make it a criminal offence to harbour dacoits whose operations were carried on in Native States territory; the other was the re-organisation of the Thuggee and Dacoity Department, with the object of removing the friction that too frequently arose between the officials of the department and political officers in the Native States. In the new scheme, which in regard to Central India and Rajputana has been brought into force since the close of 1892 93, care has been taken not to impair the authority of the Durbars in respect to the suppression of ordinary crime within their respective States, and to uphold the position and powers of the political officers.

Hyderabad.

It was not only in the States within the scope of the Thuggee and Dacoity Department that dacoity was seriously prevalent in 1892–93. The Province of Kathiawar was disturbed by the numerous outrages of a gang of outlaws from the Malia State. The police of the Native States proved incompetent to cope with these men without European direction and superintendence. Strong measures had to be taken. The Malia State, the headquarters of the gang, was attached and placed under a European officer; the Agency police was strengthened, and the police of several Native States placed under European superintendents. The gang was finally attacked and killed to a man, but at the cost of the lives of Lieutenant Gordon and two of his men. It is anticipated that this success will greatly reduce the number of dacoities in Kathiawar.

There is little precise information regarding the administration of Hyderabad in 1892-93. There were changes in the *personnel* of the higher officers both in 1892–93 and in the succeeding year, of which the most important was the succession of Nawab Vikar-ul-Umra as Prime Minister in place of Sir Asman Jah. An abstract report of the latter's administration between the Fasli years 1297 and 1300, *i.e.* 1887–88 to 1890–91, has recently been issued. The total revenue is stated therein to have amounted during the four years to Rx. 14,033,926 and the expenditure to Rx. 13,578,020. The yearly surplus would thus be nearly seven lakhs. The figures show a considerable improvement as compared with those of the four preceding years. It is noticed that land revenue is collected with extreme punctuality and ease, and that the peasantry are contented and prosperous. Survey and Revenue settlement are progressing, 66 out of 117 talukas having been assessed and settled; the system adopted in the State is, with some modifications, the same as that which prevails in the Bombay Presidency. Reforms of considerable importance in various departments are alluded to in the report. To improve the judicial administration, the pay of the judges of the Chief Court and of the District Courts was raised. A draft of a Penal Code for the Nizam's dominions was prepared, and several useful enactments were passed. The jail administration was much improved. The police were brought under better discipline, their duties were more clearly defined, and the pay of the officers was increased. The village police were also brought under the supervision and control of the Inspector General of Police. A new mint was almost completed at the end of the period dealt with in the report. It is much needed for the improvement of the Hyderabad coinage. An enormous increase in the number of schools and children under instruction shows the advance in education that was made during Sir Asman Jah's administration.

The total revenue of the Hyderabad Assigned Districts (Berar) in 1892-93 amounted to Rx. 985,548, compared with Rx. 1,027,632 in the previous year. Part of the decrease, representing land revenue collections postponed till the following year, was nominal, the remainder was due to diminution in the excise and forest receipts. In provincial disbursements there was a slight decrease from Rx. 909,202 to Rx. 907,992, the decrease in military expenditure alone amounting to Rx. 16,827. The surplus of revenue over expenditure was only

only Rx. 77,456, which is less than the surplus of any year since 1871–72, excepting 1878–79 only. There was actually paid to the Nizam in 1892–93 on account of accrued surplus a sum of Rx. 83,104, making a total of Rx. 3,058,822 paid over on this account since the cession of Berar in 1852–53. INTERNAL STATES.

In Mysore, the year 1892–93 was one of exceptional prosperity. From a statement published on the authority of the Dewan or minister it appears that the revenue was Rx. 1,700,000, or Rx. 265,000 more than in 1891–92. The chief items of increase were Rx. 166,000 from land, and Rx. 105,000 from excise. The increase of excise receipts, 50 per cent. as compared with 1891–92, is attributed to the abolition of intermediary agents in the administration. In seven years the excise revenue has increased 260 per cent. The expenditure of the year is shown at Rx. 1,623,000, but of this Rx. 230,000 represent repayment of loans, investments in Government securities, and capital outlay on railways, and the remainder includes Rx. 290,000 expended on public works. The extension of roads and railways, together with post and telegraph facilities, has led to a great development of trade and an expansion of agriculture. Gold mining is also yielding larger profits. The output of the gold mines in 1892 exceeded 163,000 ounces, valued at nearly a crore of rupees; the royalty paid to the State in the financial year was more than 5 lakhs. An extension of the railway system to the Kolar Goldfields, almost completed by the close of 1893, is likely to add to the prosperity of the mines. Progress is recorded in municipal affairs; the work of the Municipalities and Local Fund Boards is said to have been generally well done, and increased attention is said to have been paid to improving the condition and sanitation of towns and villages. The Representative Assembly of the State, which is the only institution of the kind in India, held its twelfth annual meeting in 1892, and is said to have discussed over 600 subjects during the five days of its session. The representatives present at the Assembly numbered 303, of whom five were Europeans, 16 were Mussalmans, and 282 Hindus. Mysore.

No Administration Report of the Baroda State has been issued since that for the year ending July 1888. The Gaekwar was absent from his State during the greater part of 1892–93; his absence, which has been frequent in recent years, is the cause of some difficulties and delays in the administration. Considerable agitation has been caused in the State by the operations of the Alienation Department, which was intended to secure for the State its proper revenue from lands which had been fraudulently or irregularly appropriated by individuals. Much has been done by the State for education; the number of schools is given at 1,105, with 73,900 scholars. A system of compulsory education is under contemplation. No information can be given in regard to the financial or other departments of the Administration. Baroda.

The following is a Table of the Rajputana States, with their revenues, viz.:— Rajputana.

| State. | Area in Square Miles. | Population in 1891. | Estimated Revenue. | |
|---|---|---|---|---|
| | | | 1891–92. | 1892–93. |
| | | | Rx. | Rx. |
| Udaipur (Mewar) | 12,861 | 1,862,478 | 259,630 | 375,000 |
| Dungarpur | 1,440 | 165,400 | 17,640 | 14,567 |
| Banswara, &c. | 1,937 | 212,269 | 20,400 | 25,988 |
| Pratapgarh | 959 | 87,975 | 19,240 | 26,764 |
| Jaipur | 15,349 | 2,832,276 | 619,130 | 619,007 |
| Kishangarh | 874 | 125,516 | 34,590 | 35,748 |
| Lawa | 19 | 3,360 | 1,280 | 450 |
| Jodhpur (Marwar) | 37,445 | 2,521,727 | 430,000 | 415,700 |
| Jesalmer | 16,039 | 115,701 | 15,600 | 15,870 |
| Sirohi | 1,966 | 188,977 | 25,800 | 17,500 |
| Bikaner | 23,090 | 881,955 | 199,770 | 180,000 |
| Bundi | 2,225 | 295,675 | 68,190 | 80,000 |
| Tonk | 1,415* | 198,934* | 153,900 | 120,000 |
| Shahpura | 406 | 63,646 | 28,600 | 28,900 |
| Bharatpur | 1,961 | 640,303 | 271,790 | 271,350 |
| Dholpur | 1,156 | 279,890 | 95,900 | 92,534 |
| Karauli | 1,229 | 156,587 | 52,650 | 47,773 |
| Alwar, &c. | 3,051 | 767,786 | 282,020 | 265,879 |
| Kotah | 3,803 | 526,267 | 235,280 | 240,000 |
| Jhalawar | 3,043 | 343,601 | 151,460 | 150,000 |
| Total | 130,268 | 12,220,343 | 2,982,870 | 3,023,030 |

* Excluding the Tonk pergunnas in Central India.

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In Alwar the year was particularly eventful. A special court was instituted for the trial of the murderers of Kunj Behari Lal, a member of the State Council. This was followed by the death of the Maharaja, under whose authority the accused tried to shield themselves from the crime. The plea was, however, disallowed, and sentence was executed on the murderers. Jey Singh, the son of the late Maharaja, succeeded to the throne. During his minority the administration is being conducted by the Alwar Council under the general guidance of the political agent. The finances of the State are in good order, there being a balance of 59 lakhs in the treasury and a yearly surplus of two lakhs.

In December 1892 Maharao Oomeid Singh, of Kotah, was installed, though, owing to his inexperience, certain departments of the administration were retained temporarily under the Political Agent's superintendence. The State had been under British management since February 1874. At that date the treasury contained only Rx. 152 in cash, while the claims against the Durbar amounted to Rx. 895,194. Inquiry reduced these debts to Rx. 464,312, all of which have been paid; and the cash balance in the State Treasury on 31 March 1893 was Rx. 153,911. During the period of management nearly 46 lakhs had been spent on the public works department.

The Maharaj Rana of Jhallawar, who had been deprived of his ruling powers a few years ago, was, towards the end of 1892, re-invested with governing powers in all departments except in matters of revenue, which are under the control of the State Council. Rules have been framed, under which, it is hoped, that this dual control will work successfully.

The affairs of Banswara continue to give anxiety. In Udaipur (Meywar) irregularities in the collection of revenue and the administration of justice were discovered which proved the need for the appointment of responsible ministers of capacity and integrity.

Revenue settlement, mostly under the superintendence of British officers, is being carried out in several states. In Tonk and in Dholpur the settlement operations were completed in the year under review. In Udaipur these were expected to be finished in the succeeding year. They have been started in Bikaner, and are expected to begin shortly in Jodhpur (Marwar).

The scarcity which marked the years 1890-91 and 1891-92 in Rajputana passed away in the year under review. But prices remained high, although the harvests generally were favourable.

The amount spent on public works by the States of Rajputana in 1892-93 was Rx. 426,000, of which Rx. 180,000 were expended in Jodhpur, Rx. 109,000 in Jaipur, Rx. 53,000 in Alwar, Rx. 44,000 in Kotah, and Rx. 22,000 in Udaipur. The expenditure in Jodhpur is chiefly on railways.

The Walter-krit Sabha, which is an association with the object of restraining excessive expenditure on marriages and funerals, continued to work beneficially. The number of breaches of the regulations in 1892 was considerably less than in the previous year. It is reported that castes other than Rajputs are beginning to realise the importance of rules of this kind.

Of the so-called criminal tribes, the Meenas and Bhils were more than usually troublesome, but the Moghias are said to have behaved well on the whole. Arrangements are being made for the better supervision of the Moghias in times of scarcity, when they are disposed to desert their settlements *en masse*.

Praiseworthy efforts are being made in many of the Rajputana states for the encouragement of education. The proportion (one out of 11) of boys under instruction in Jaipur is particularly creditable. Female education is also making way in Jaipur and in Alwar, but of the other states this cannot be said. A satisfactory report is given of the Mayo College.

Increased attention is being paid to sanitation. Suitable drainage or sewage schemes have been adopted in several of the chief towns. In Alwar rules have also been made for village sanitation. The number of dispensaries and the work performed by them increase satisfactorily year by year.

Central India.

The subject of dacoity, which is the topic of chief interest in the Central India Agency Report for 1892-93, has already been dealt with, but it may here be said that some of the chiefs in this agency, particularly in Bundelkhand, have not been without blame in the matter. The Rao of Alipura has been allowing dacoits to shelter in his territory, and has given grounds for suspicion even as to his loyalty. The territories of Datia and Ajaigarh have also been used as shelter by the dacoits, and in Bijawar the Durbar has hardly been strong

strong enough to control the Thakors who abetted dacoity. But in all these States a considerable change for the better has been effected. INTERNAL STATES.

The administration of Gwalior has been conducted satisfactorily and without friction. Its financial position is very strong. Besides investments, including 3½ crores lent to the Government of India, there was in June 1892 a State balance of Rx. 4,885,000. The receipts of the year were Rx. 1,419,000. The expenditure, Rx. 1,347,000, was larger than that of the previous year by nearly 24 lakhs in consequence of the marriage of the Maharaja and his sister. Much useful work has been done in the Public Works Department. Considerable progress has been made with the Goona-Bina railway, and the Bhopal-Ujjain line has been commenced. A number of feeder roads have been, or are being, constructed. The memorial hospital and college at Laskar are nearly completed, and four other new hospitals are under construction. Settlement operations were conducted in certain districts; but the procedure was found to be not wholly suitable and the Council of Regency decided to postpone the work of settlement. Meanwhile steps were taken to push on the survey, and to train and organise the patwaris (village accountants), and through them to obtain the papers and statistics necessary for making an assessment. The whole of the work was placed under the superintendence of a European officer. The judicial courts are said to have worked well, except for a tendency to deal too leniently with grave offences, such as dacoity.

In Indore the administration is considered to have been generally satisfactory. The Maharaja has continued to pay close attention to the Revenue Department. In the northern districts of his State, which he inspected during the year, he found the assessments to be too high and ordered them to be reduced. The total revenue of the year is given at Rx. 637,000, and the expenditure at Rx. 617,000. The State was comparatively free from violent crimes, and the administration of justice was satisfactory. There was no change in the office of Dewan.

The State of Bhopal, in which the office of minister continues to be held by Munshi Imtyaz Ali, was well administered. The prevalence of dacoity much disturbed the State, but the measures adopted since the close of the year may be expected to restore order. The educational and medical institutions are doing good work.

In the other States the more important events were the following. The Rajas of Rutlam and Dewas State, Junior Branch, died during the year. The former was a wise and able ruler, considerate, and popular with all classes of his subjects, and much respected by neighbouring princes. His son who succeeds is a minor. The administration, in which no changes of importance were required, unless the introduction of the budget system be considered an important change, was continued under the late Raja's Minister, Khan Bahadur Shahmut Ali, C.S.I., subject to the Political Agent's supervision. The Dewas State, Junior Branch, on the Raja's death, was taken under superintendence during the new Raja's minority. The annual income of the State is a little over 3½ lakhs, and exceeds the expenditure. The State, moreover, holds a considerable sum invested in Government securities. The Maharaja of Dhar, who had only partially recovered from a stroke of paralysis, was absent from the State during the year. The administration consequently suffered. The Governor General's Agent reports very unfavourably on the rule of the Chiefs of Sailana, Sitamau, and Nagode on account of their incompetence and unwillingness to accept good advice. The financial condition of Jhabua continues to cause anxiety, but the management of the State is not wanting in ability. The affairs of Jaora are improving, as its debt is being cleared off. The Thakur of Jakhnaoda's management of the Ali Rajpur State, of which the Rana is a minor, is satisfactory, and the financial position of the State is improving. The Maharaja of Rewah is nearly old enough to begin to undertake the administration of the State. With a view to the coming change, extended powers were conferred on the State Council. The finances of the State are in a good condition. The year closed with a surplus of 3 lakhs, and a total balance in hand of 15½ lakhs.

Detailed information is wanting in regard to the principal States subordinate to the Punjab Government. The largest State, Patiala, of which the Maharaja has been in power for three years, is beginning to give cause for anxiety. His Highness has been much absent from his State, his recent marriage has been regarded with disfavour by neighbouring chiefs, and the financial position has been PUNJAB.

INTERNAL STATES.

been made critical owing to reckless expenditure. The establishment of a High Court in the State is a reform deserving of notice.

The only fact reported of Bahawalpur is that the Nawab imposed temporary export duties on grain in order to check the large exports from the State. In Jind considerable excitement was caused by a case arising out of the slaughter of kine. The killing of kine being illegal in the State, severe penalties were inflicted on certain persons who had been found guilty of a breach of the law. The conduct of the Raja of Suket continues to be unsatisfactory. A European officer has been appointed to act as Councillor in the State, and an officer of the Punjab Revenue Establishment has been appointed as the Raja's Wazir or Minister. Improvement in the administration is hoped for. The Mandi State was troubled during the year by an agitation against the Wazir. At one time also there were apprehensions of famine, to meet which advances were freely made to agriculturists, and relief works started. Of the other States, Chamba and Nahan (Sirmur) are praised for the energy and efficiency of their administration.

One other feature of the year's administration which may be mentioned is, that the more important States on the Sutlej have been invited to co-operate systematically with the British authorities for the purpose of checking crime on their borders, and considerable improvement is hoped for from the measures which have been adopted with this object.

North-West Provinces.

The Government of the North-West Provinces has expressed itself satisfied with the Raja of Tehri's aims, and with his administration during 1892-93, the first year of his rule. The finances of the State, with an income of Rx. 22,665, expenditure of Rx. 16,613, and a closing balance of Rx. 64,377, are in good condition. The Raja has been advised to increase the expenditure on roads, schools, and hospitals, but his object for the time seems to be to reduce his expenditure and increase the surplus which he can lay by.

In Rampur also the financial position is sound. About 25 lakhs were spent out of an income of 30 lakhs in the year. The affairs of the State are, during the Nawab's minority, under a Council, of which the president is a British officer. Considerable advances have been made in most departments; the army has been reformed; the judicial administration has been improved in character and efficiency, and a general sense of security established. The department now most in need of reform is that of the police, who wholly failed to deal with serious and organised crime. Measures were being taken at the close of the year for the improvement of the pay and discipline, and therefore of the efficiency, of the force. There was a dangerous outbreak in the jail during the year, for which severe punishments were passed on the ringleaders. The education of the Nawab progresses satisfactorily. A large portion of the State balance is to be devoted to the construction of the section of the Bareilly-Rampur-Moradabad Railway, which is in Rampur territory. The line was approaching completion at the end of 1893.

Bengal.

The Maharaja of Hill Tipperah in 1892–93 abolished the post of Minister, and formed an administration consisting of two of his sons and six of his Thakors, or principal subjects. The management of his estates in British territory was placed in the hands of a retired Indian civilian. The chief sources of revenue are taxes on forest produce and on cotton and oil seeds; the former showed a satisfactory increase. The total income of the State exceeded Rx. 61,000. During the two years of the late Minister's administration the State debts were reduced from 10 to 5 lakhs. In the year under review, Rx. 13,000 were paid off.

With the approval of Government, the Maharaja of Kuch Bihar appointed a retired Indian civilian to be the Vice-President of the State Council and Superintendent of the State, in place of the British officer who had previously held these offices The revenue of the State in 1892–93 was Rx. 207,000, and the expenditure Rx. 198,000, including a lakh of rupees as the first instalment on the repayment to Government of the loan of eight lakhs granted for the construction of the State Railway. This line was opened for traffic in September 1893.

The Chota Nagpur and Orissa Tributary Mahals continue to be in a very backward condition. There were not many marked signs of progress during the year under review, except in the matter of communications. The harvest in the Orissa Mahals was favourable, but that in the Chota Nagpur States was below the average. The year was generally uneventful. But in Keonjhur disturbances prevailed. The Bhuyans continued in their refusal to submit themselves to the Rajah, notwithstanding the punitive operations of a detachment

ment of Government police. The conduct of the Chief of Athgarh was not satisfactory. The Government estate of Porahat, which used to be included in the Chota Nagpur group of Native States, was by an Act of February 1893 annexed to the Singhbum district of the Chota Nagpur division. INTERNAL STATES.

The people of the Feudatory States in the Central Provinces are reported to be, in general, contented. Their standard of comfort has risen with the rise of agricultural prices, which the railway and the development of trade have brought. There remain large tracts of fertile land still uncultivated, and there is much room for improvement in the system of agriculture. Of the 15 Feudatory States, eight are temporarily managed by Government. The management of Kanker was taken over by Government during the year, but that of Sakti was restored, subject to certain restrictions, to its Chief. The State which gave most trouble was Chhuikhadan, where an empty treasury, unpaid public servants, and general financial disorder brought matters to a crisis. The Chief was compelled to abandon his obstructive attitude, and to give his Dewan fuller powers, with permission to carry out the reforms recommended by the Political Agent. The most progressive of the States managed by their own rulers are said to be the Bamra and Nandgaon. In the former, however, there are complaints of excessive assessments, harsh forest rules, and the oppressive exaction of forced labour, and of benevolences on the occasion of marriages in the Chief's family, which, it may be added, includes 16 sons and daughters. Revenue settlement operations were in progress in almost all the States; much was done to increase the efficiency of the police; education made some progress; and the popularity of dispensaries increased steadily. The year, however, was not a healthy one. The crops were generally good. Central Provinces.

The principal State subordinate to the Madras Government is Travancore. It continues to show steady progress. Its revenue for the Malayalam year, August 1891 to August 1892, exceeded 84 lakhs, an increase of 4½ lakhs over the income of the previous year. The Durbar is, with the approval of Government, setting itself to apply a portion of its accumulated balance of over 70 lakhs to reproductive and useful schemes of public works. The State enjoys a considerable trade; in 1891–92 its imports and exports together were valued at 195½ lakhs. The Legislative Council of Travancore was reconstituted during the year on a more representative basis. In the course of the year it enacted five Regulations, of which the chief revised the laws relating to the High Court, and dealt with the acquisition of lands for public purposes, and with criminal procedure. The administration has a tendency to follow in the lines laid down in British India. The figures illustrating education showed a decline in the year under report, as compared with the previous year, in which there had been an abnormal increase. But in matters of education it must be remembered that Travancore holds a more advanced position than other Native States, or than British India. At the close of the year the Dewan Rama Rao retired from his office, and the Government of Madras recorded its congratulations to His Highness the Maharaja on the steady improvement which, under his auspices, had been observable in almost all departments of the State. Madras.

In Cochin, the year is said to have been one of progress in several respects, especially in regard to education, the post office, the administration of civil justice and of the medical department, and to some extent in regard to jails. The year under review was the last of the administration of the Dewan, C. Thiruvencata Chariyar. The new Dewan, V. Subramanya Pillai, is said to have entered upon his duties with a determination to improve all branches of the administration. Improvement is specially needed in the collection of revenues in the Salt, Abkari, and Forest Departments. The income of the State amounted to 17½ lakhs. This is a falling off from the figure of the previous year. But the general financial position should give no cause for anxiety, as the expenditure was less than the revenue, and the year closed with a State balance of nearly 44½ lakhs. Of the other States in the Presidency nothing need be reported, except that the Raja of Sandur died during the year. His infant son was recognised as the successor, and the late Raja's brother was appointed to manage the affairs of the State during the minority. Pudukota continues under British administration.

But for the outbreak of dacoity in Kathiawar, which has already been dealt with in this chapter, the year was one of unbroken peace and prosperity for the three or four hundred States subject to the political control of the Governor of Bombay. Bombay

INTERNAL STATES.

Bombay. Except in Kolhapur the harvests were generally fair; but the public health in the Gujarat States, and in those in the Southern Mahratta country, suffered from epidemics of cholera and fever. Crime, particularly serious crime, decreased in a marked degree; trade, aided by the abolition of vexatious imposts, and by the improved communications provided by enlightened rulers, continued to expand. It need not, perhaps, be wondered at that civil litigation is at the same time rapidly increasing. Of the Bombay Native States, one only, Khairpur, stands outside the current of administrative progress. The rulers of the rest are more and more assimilating their systems of government to that prevailing in British India.

The chronic disputes between Cutch and the States of Morvi and Navanagar on the opposite side of the Runn, reached a crisis during the year under review, and it was decided to take under temporary British management the villages and rights possessed by the Kathiawar States in Cutch, and by the Cutch State in Kathiawar, the object being to effect an accurate valuation of these properties, which is to be followed by a complete permanent separation of the interests of the States concerned.

The troubled condition of Kathiawar made it necessary for the Bombay Government to attach the State of Malia, the Chief of which had failed to control the turbulent tribe of Meenas, and had allowed his territory to become a nest of disorder, and the home of the outlaws who were ravaging the province. Moreover, the debts of the State exceeded five lakhs, or five times the income of the taluka. In Junagadh a Commission was appointed to inquire into, and effect a settlement of, some long-standing differences between the Nawab's Hindu and Mohammedan subjects. Unfortunately, before steps had been taken to carry out the recommendations of the Commission, the animosity between the parties broke out in serious fighting during the Mohurrum festival. This incident, however, belongs to the Report for 1893–94.

The most important States under British administration during 1892–93 were Porbandar, Rajpipla, Cambay, and Savantvadi. In the three former the work of reform was pushed on; in Savantvadi, which has long been under administration, there was less occasion for reform, but satisfactory progress on existing lines, especially in the matter of education, was recorded. Its chief town was benefited during the year by the completion of its new waterworks.

The following observations may be made regarding the more important States.

For Cutch, the year was not prosperous. There was a decline in trade, in revenue, in State expenditure on public works, and in the number of children under instruction; at the same time, the public health suffered, and crime increased.

In the Palanpur Superintendency the commencement of the Palanpur-Deesa Railway is to be noticed. The finances of both Palanpur and Radhanpur were satisfactory, and considerable sums were spent on public works. The abolition of *vev* or forced labour in Palanpur, and of import duties in Radhanpur, reflects credit on the Chiefs. Education is backward, and progress slow. The Agency police were reorganised during the year.

In the Mahikantha Agency, the Chiefs of Pol, Varsoda, Pethapur and Vasna, obtained their majority, and were entrusted with the management of their States; 18 others remained under management. Idar is the only important State in the Agency, and of the progress of this State little information can be furnished.

In Kathiawar the railway system profited by the development of trade, and gave more satisfactory returns on its capital outlay. The extension from Jetalsar to Rajkot was opened to traffic during the year, and arrangements were being made for a further extension to Jamnagar and to Jodia, the port of Navanagar. The Nawab of Junagadh, Sir Bahadur Khanji, G.C.I.E., died during the year, and his brother, Rasal Khanji, was recognised as his successor. The State Council of Bhavnagar appears to have worked satisfactorily. The income of the State increased by four lakhs. The continued absence of the Thakor Saheb of Gondal, who has been away from his State for two and a half out of the last three years, is considered an unsatisfactory feature of the year's report. A change of some importance was made in the matter of education. Hitherto the control and management of all educational institutions in Kathiawar, which may be said to have had their beginning in 1865, had been entrusted to a Government educational inspector. In 1892–93 it was decided to transfer, on certain general conditions, the control of these schools to such of the States as, in the opinion of the Political Agent, were, owing to the character of their administration, fit to undertake the control, and were willing to exercise it. These

States were Junagadh, Bhavnagar, Porbandar, Morvi, Vankaner, Palitana, Rajkot, and Wadwan. The number of educational institutions in Kathiawar increased during the year from 939 to 998, and that of scholars from 59,804 to 60,957. INTERNAL STATES.

In Cambay the work of reform made good progress. The new survey settlement was introduced and was received with general favour. Arrears of land revenue were collected without difficulty, notwithstanding a harvest that was below the average. State liabilities were liquidated to the amount of 1½ lakhs. The courts worked satisfactorily, and there was less crime. Public works of importance were under construction; and there was a satisfactory increase in the number of schools and scholars. It was anticipated that it would be possible to re-invest the Nawab with full powers of government during the year 1893–94.

In the Rewa Kantha Agency the chief feature was the satisfactory administration of the Rajpipla State under a British officer. The financial position of the State is very strong. The management of the State forests is receiving careful attention. What is now most required is the establishment of a higher standard of magisterial and police administration.

In the South Konkan the Nawab of Janjira continues to earn the highest praises of Government by his successful and enlightened administration. The capital of this State, as well as that of Savantvadi, was benefited during 1892-93 by the completion of an important scheme for the supply of pure water.

A Council of Regency, under the supervision of the Political Agent, is successfully conducting the affairs of Kolhapur during the minority of the Chief. The season was not favourable to the cultivators. Notwithstanding, the horse and cattle show held at Chingli during the year was a great success. An advance is reported in educational matters; but there was some falling-off in revenue. It was possible, nevertheless, to spend 5¼ lakhs on public works.

Jath and Daphlapur were during 1892–93 added to the number of States under the supervision of the Political Agent of Kolhapur and the Southern Mahratta Country. Jath, which is now under management during a minority, no longer causes anxiety, and the report on the Karundvad Senior State indicates improvement. Generally speaking, the administration of these States is favourably described.

## TRANSMARINE DEPENDENCIES AND INTERESTS.

TRANSMARINE DEPENDENCIES AND INTERESTS.

Aden.

The relations of the Aden Residency with the neighbouring Arab tribes were generally friendly. Some sections of the Subaihi and of the Lower Aulaki tribes, however, gave trouble by their raids. It is noticed that the number of ships visiting Aden and Perim fell off, and was, indeed, lower than in any year of the last decade. But it must be remembered that the size of the ships is yearly increasing. The trade of the port was larger than in any previous year, and reached the total value of Rx. 8,175,500, of which Rx. 4,474,300 represented imports. While there was some improvement in the health of the general population in Aden, that of the troops, which suffered in 1891-92, was still worse in 1892-93. There has been an enormous and progressive growth of admissions of patients suffering from ague during the last four years. All the hospitals were more largely resorted to than in the previous year.

Somali Coast.

In the British Protectorate on the Somali Coast the year was not one of prosperity. There was an epidemic of cholera at Zaila and at Bulhar; the latter place was also destroyed by fire. The peace of the interior was disturbed not only by feuds between the Somalis, but also by raids of the Abyssinians on the Ogaden tribe. The progress of the trade of the Protectorate is thus described: that at Berbera increased largely; the Bulhar trade declined slightly; and at Zaila there was a very large decrease. The net variation was an increase to the extent of seven lakhs. The revenue of the Protectorate rose to nearly Rx. 22,000, which fell short of the expenditure by about Rx. 7,000, a sum nearly equal to the expenditure on public works, chiefly for police and military quarters and Residency buildings, during the year. The limits of British influence in the interior have not yet been defined.

Muscat and Persian Gulf.

The reports of the Political Officers who have the supervision of British Indian interests in Muscat and on the Persian Gulf Coasts describe the year as one more than usually disturbed, except in Oman itself, the political affairs of which were markedly quiet. There was an increase of piracy; there were disputes between the Turkish authorities at El Katif and the Chief of Bahrein, and apprehensions lest the former should seek to enforce their pretensions on that island. Serious fighting also took place between the Wali of Bussorah and

TRANSMARINE INTERESTS.

the insubordinate tribes of the El Katr peninsula. In Persian territory the severe rule of the Governor of Bushire led to a rising of the Baharloo tribe, which for a time closed the trade routes and spread the greatest alarm in the naighbourhood of Bushire. There were other feuds, also, in this neighbourhood and in Persian Baluchistan; and the prosperity of the country was further disturbed by an epidemic of cholera. Some cases of the importation of slaves into Persia were reported, but no slave dhows were captured by British vessels. There was a serious decline in the trade of the ports of Southern Persia in 1892. The aggregate of the trade of Bushire, Shiraz, Lingah, Bunder Abbas, Bahrein, and the ports on the Arab coast, was valued at 460¼ lakhs for exports and 589 lakhs for imports. In Muscat the value of the exports was 1,055,000 dollars, and of the imports 1,982,000 dollars.

## ARMY.

ARMY.

The sanctioned establishment for 1892–93 was as follows:—

| | | | |
|---|---|---|---|
| British Troops | | 73,032 | |
| Miscellaneous Officers | | 999 | |
| Native Troops | Bengal | 83,905 | |
| | Madras | 32,102 | |
| | Bombay | 28,748 | |
| | | | 144,755 |
| Total | | | 218,786 |
| Corresponding Total for 1891–92 | | | 218,244 |

The actual strength of the Army on the 1st April 1893 was as follows:—

| | | | |
|---|---|---|---|
| **BENGAL.** | | | |
| *British.* | | | |
| Cavalry (5 regiments) | 3,289 | | |
| Artillery (52 batteries) | 7,411 | | |
| Engineers | 38 | | |
| Infantry (33 regiments) | 34,265 | | |
| | | 45,003 | |
| *Native.* | | | |
| Cavalry (24 regiments) | 14,973 | | |
| Artillery (7 batteries) | 1,554 | | |
| Sappers and Miners (8 companies) | 1,320 | | |
| Infantry, including Punjab Frontier Force (64 regiments). | 59,196 | | |
| Other corps, including Hyderabad Contingent. | 13,768 | | |
| | | 90,811 | |
| | | | 135,814 |
| **MADRAS.** | | | |
| *British.* | | | |
| Cavalry (2 regiments) | 1,376 | | |
| Artillery (15 batteries) | 2,197 | | |
| Engineers | 69 | | |
| Infantry (10 regiments) | 9,803 | | |
| | | 13,445 | |
| *Native.* | | | |
| Cavalry (3 regiments) | 1,851 | | |
| Sappers and Miners | 1,474 | | |
| Infantry (32 regiments) | 25,613 | | |
| Other corps | 4,559 | | |
| | | 33,917 | |
| | | | 47,362 |
| **BOMBAY.** | | | |
| *British.* | | | |
| Cavalry (1 regiment) | 682 | | |
| Artillery (21 batteries) | 3,188 | | |
| Engineers | 62 | | |
| Infantry (10 regiments) | 9,768 | | |
| | | 13,700 | |
| *Native.* | | | |
| Cavalry (7⅕ regiments) | 4,415 | | |
| Artillery (2 batteries) | 423 | | |
| Sappers and Miners | 808 | | |
| Infantry (26 regiments) | 20,767 | | |
| | | 26,413 | |
| | | | 40,113 |
| TOTAL | | | 223,289 |

The

The number of Troops in the Burma District on the 1st of April 1893 was— ARMY.

| | |
|---|---|
| British | 3,814 |
| Native | 10,502 |
| Total | 14,316 |

1892-93.

The total of the Native Army Reserves in India on 1st April 1893 was 11,570.

The net expenditure on the Army in 1892-93 was—

| | | |
|---|---|---|
| In India | Rx. | 14,799,048 |
| In England | £. | 4,842,420 |
| Exchange | Rx. | 2,913,323 |
| Total | Rx. | 22,554,791 |
| Total in 1891–92 | Rx. | 21,500,197 |

The number of Volunteers in the whole of India on 1st April 1893 was as under :—

| | Enrolled Strength. | Efficient. |
|---|---|---|
| Bengal | 13,710 | 12,525 |
| Madras | 8,725 | 7,259 |
| Bombay | 5,501 | 5,166 |
| | 27,936 | 24,950 |

On the 1st of April 1892 the number of enrolled Volunteers was 26,746, of whom 23,454 were efficient. Tho number of Volunteers enrolled in the Reserve at the end of 1892–93 was 1,227.

During the year 1892-93 the following measures were sanctioned or brought into effect :—

The British cavalry regiments in India were organised in four squadrons, in lieu of eight troops as heretofore, the officer commanding a squadron being made responsible to the commanding officer of the regiment for the discipline, horses, arms, accoutrements, stores, &c., of the whole squadron. This system was already in force in the native cavalry.

Revised regulations were issued for the volunteer reserves to be formed in India and Burma. These reserve corps consist of Europeans or those persons of European descent who, from various causes, are unable or unwilling to enlist in active volunteer corps. They are armed and equipped in the same manner as members of active volunteer corps.

An important change in the system of recruiting for the Bengal native army was introduced on the 1st April 1892. Recruiting depots were established at the following stations, each to form the centre of a recruiting district for the classes specified :—

| | |
|---|---|
| Peshawur | for Pathans. |
| Rawal Pindi | ,, Punjabi Mohammedans. |
| Amritsar | ,, Sikhs. |
| Sealkote (in winter) | ,, Kashmir Dogras. |
| Dharmsala (in summer) | ,, Kangra Dogras. |
| Delhi | ,, Jats and Hindustani Mohammedans. |
| Lucknow | ,, Hindustani Hindus. |
| Gorakhpur | ,, Gurkhas. |

ARMY.

Each centre is under an officer specially selected for his knowledge of the classes with whom he has to deal. All regimental recruiting parties report themselves to him for orders, and all recruits enlisted by them are brought to him for approval; but men presenting themselves for enlistment at regimental headquarters may be accepted and passed by commanding officers. The Peshawur district includes all trans-Indus territory north of Dera Ghazi Khan, and the Rawal Pindi district the tract between the Indus and the Jhelum. Operations from the Amritsar and Sealkote-Dharmsala centres extend to all districts inhabited by Sikhs and Dogras respectively; while the Delhi and Lucknow centres divide the rest of the recruiting area of Upper India, with the exception of the Nepal border, which is included in the Gorakhpur district.

With a view to increasing the efficiency and usefulness of the Intelligence branch of the Quartermaster General's department in India, it was enlarged and reorganised on the following scale:—The head of the branch is an Assistant Quartermaster General, and the whole office is divided into four sections, each under a Deputy Assistant Quartermaster General, who is assisted by a paid attaché and a sufficient clerical staff.

The military branch of the veterinary department in India was increased from 42 to 49 officers, to correspond with the increase in the number of horses which had taken place since 1885, when the establishment was reduced on the substitution of a system of station veterinary hospitals for the old regimental system.

During the year 1892, though the order did not have effect until the 1st April 1893, the following changes were sanctioned in the system of clothing, bedding, &c., for British troops:—

The State now provides all clothing actually required by the soldier, money compensation in lieu of clothing being abolished save in very special cases. All clothing, except light drill, remains the property of the State, instead of, as at present, becoming the property of the soldier, when the period fixed for its duration has been completed. These periods have been lengthened in the case of cloth clothing, which in many parts of India is little worn; and in view of meeting the requirements of various climates, commanding officers may substitute for any periodical issue other clothing of equivalent value. Similar changes are made in the bedding issues.

Concurrently with this change, the soldier is now required to pay for his necessaries at their cost price, converted at the rate of exchange for the year, instead of at 2*s.* the rupee as heretofore.

## MILITARY OPERATIONS, 1892–93.

MILITARY OPERATIONS.

Isazai Field Force.

The object of the Isazai expedition was to capture and bring in Hashim Ali Khan of Teri, a notorious outlaw and brigand, who had taken up his abode in Baio, a Hassanzai village, near the right bank of the Indus, and to enforce the observance of the agreement concluded after the Black Mountain Expedition of 1891, by which the Isazai Tribes (Hassanzai, Akazai, and Mada Khel) were bound to give no shelter or protection to Hashim Ali Khan.

The following was the composition of the force, which was concentrated at Darband on the 1st October 1892:—

| | |
|---|---|
| In command - - - - - | Major General Sir W. Lockhart, K.C.B., C.S.I. |
| A.A.G. - - - - - | Major Martin, 5th Goorkhas. |
| D.A.A.G. - - - - - | Captain Gartside Tipping, 1st Bengal Cavalry. |

| | |
|---|---|
| 1st Brigade - - - - | Brigadier General Pretyman, R.A. |
| Brigade Major - - - | Captain B. Duff, 9th Bengal Infantry. |
| 1st Batt. Bedfordshire Regiment. | 700 rifles. |
| 4th Sikh Infantry - - | 600 „ |
| 25th Bengal Infantry - | 700 „ |

---

| | |
|---|---|
| 2nd Brigade - - - - - | Colonel (Brigadier General) Hammond, Corps of Guides. |
| Brigade Major - - - - | Captain W. G. Hamilton, East Lancashire Regiment. |
| 1st Batt. King's Royal Rifles | 700 rifles. |
| 1st Batt. 5th Goorkhas - | 450 „ |
| 2nd Batt. 5th Goorkhas - | 450 „ |

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Royal Artillery - - - - Lieutenant Colonel Keith, R.A.

Nos. 3, 8, and 9 Mountain Batteries, R.A.
No. 1 (Kohat) Mountain Battery.

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Divisional Troops:

11th Bengal Lancers, 2 squadrons.
Nos. 4 and 6 Companies Bengal Sappers and Miners.
30th Bengal Infantry, 700 rifles.

Reserve at Abbottabad:

2nd Batt. Seaforth Highlanders.

The force encountered no opposition on the part of the enemy. When Baio was reached on the 6th October 1892, it was found to have been abandoned. After destroying the defences the troops returned, and the field force was finally broken up on the 13th of October 1892. The conduct of the troops was excellent, but they suffered severely from sickness.

Gilgit.

The post of Chilás, in the Gilgit Agency, had been for some time past held by 300 rifles of the Body Guard Regiment, Kashmir State troops, and with the rest of the line of communication to Bunji, had been placed under the immediate orders of Major Daniell, 1st Punjab Infantry. On the 5th March 1893, owing to convoy and other duties, the available rifles at Chilás were about 270. For some time Major Daniell had received warning that an attack was preparing, which was to take place on the night of the Mohammedan feast known as Shab-i-Barab.

Unfortunately a mistake was made in calculating the night, which was thought to be that of the 2nd and 3rd March 1893. The attack was made about 3 a.m. on the morning of the 5th, and the fighting, which was severe, lasted throughout the day, when the enemy retired. The casualties were:—

One British officer (Major Daniell), three Native officers, and 19 rank and file killed.

One Native officer and 22 rank and file severely wounded.

One British officer, Lieutenant F. J. Moberly, 37th Bengal Infantry, and five rank and file slightly wounded.

The number of the enemy was estimated at between 4,000 and 5,000, and their loss at 250 killed and 50 wounded.

MILITARY OPERATIONS. Burma.

No military operation of any great importance took place in Burma during the year 1892–93.

A punitive expedition was organised to punish the Siyins and the Nwengals, on the west of the Manipur River. The operations were completely successful, and these tribes were reduced to a state of subjugation never before attained, as evinced by the surrender of 1,656 fire-arms, with a prospect of further disarmament before the close of the year.

Operations were also carried on by the military police against the Kachins to the north of Bhamo on the north-east frontier of Burmah.

The opposition of the tribes was severe and persistent, and was not overcome without considerable loss. Three British officers were killed: Captain Boyce Morton, Mr. Brooke-Meares, and Lieutenant Master, and three wounded; Native ranks, 34 killed and 66 wounded. Finally, a fort was established at Sima, where a permanent garrison was left. No further disturbances occurred during the year.

# APPENDIX.

FINANCE.

## TABLES showing the NET REVENUE and EXPENDITURE in the several Provinces of INDIA, and in ENGLAND.

Bengal.

### BENGAL.

| NET REVENUE. | 1891-92. | | | | 1892-93. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | TOTAL. | Imperial. | Provincial. | Local. | TOTAL |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue | 2,727,718 | 728,805 | — | 3,456,523 | 2,867,125 | 525,674 | — | 3,392,799 |
| Opium | 4,156,024 | — | — | 4,156,024 | 4,555,239 | — | — | 4,555,239 |
| Salt | 2,393,402 | 5,924 | — | 2,399,326 | 2,401,665 | *—4,005* | — | 2,397,660 |
| Stamps | 366,217 | 1,098,651 | — | 1,464,868 | 373,757 | 1,121,271 | — | 1,495,028 |
| Excise | 785,123 | 261,708 | — | 1,046,831 | 820,344 | 273,448 | — | 1,093,792 |
| Provincial Rates | — | 409,022 | 395,817 | 804,839 | — | 418,235 | 417,888 | 836,123 |
| Customs | 505,170 | *—46,161* | — | 459,009 | 500,336 | *—48,963* | — | 451,373 |
| Assessed Taxes | 213,112 | 206,395 | — | 419,507 | 209,253 | 202,193 | — | 411,446 |
| Other Heads | *—19,464* | 18,963 | *—204* | *—705* | *—3,238* | 19,008 | *—489* | 15,281 |
| TOTAL | 11,127,302 | 2,683,307 | 395,613 | 14,206,222 | 11,724,481 | 2,506,861 | 417,399 | 14,648,741 |
| NET EXPENDITURE: | | | | | | | | |
| Interest | *—130,110* | *—1,703* | *—3,761* | *—135,574* | *—141,904* | *—2,097* | *—3,942* | *—147,943* |
| General Administration | 27,559 | 161,633 | 29,218 | 218,410 | 28,260 | 163,651 | 30,830 | 222,741 |
| Law and Justice | — | 869,614 | — | 869,614 | — | 885,394 | — | 885,394 |
| Police | 4,431 | 551,318 | *—43,122* | 512,627 | — | 560,413 | *—41,672* | 518,741 |
| Education | — | 195,645 | 107,430 | 303,075 | — | 197,191 | 99,171 | 296,362 |
| Medical | — | 141,988 | 6,683 | 148,671 | — | 144,223 | 7,906 | 152,129 |
| Territorial and Political Pensions | 119,990 | — | — | 119,990 | 118,611 | — | — | 118,611 |
| Civil Superannuation | *—17,256* | 147,254 | 127 | 130,125 | *—11,201* | 162,485 | 437 | 151,721 |
| Stationery and Printing | 182,795 | 117,848 | 4,998 | 305,641 | 163,381 | 124,370 | 5,099 | 292,850 |
| Railway Revenue Account | *—65,228* | *—177,548* | — | *—242,776* | *—479,073* | *—308,107* | — | *—787,180* |
| Irrigation | — | 279,329 | 74 | 279,403 | — | 245,144 | *—173* | 244,971 |
| Buildings and Roads | 76,045 | 362,016 | 385,175 | 823,236 | 32,138 | 251,193 | 411,169 | 694,500 |
| Other Heads | 65,742 | *—40,037* | 19,249 | 44,954 | 4,150 | *—42,193* | 44,982 | 6,939 |
| Provincial and Local Balances | — | *—11,934* | *—22,574* | *—34,508* | — | *—9,826* | *—1,388* | *—11,214* |
| TOTAL | 263,968 | 2,595,423 | 483,497 | 3,342,888 | *—285,638* | 2,371,841 | 552,419 | 2,638,622 |
| Surplus | 10,863,334 | 87,884 | *—87,884* | 10,863,334 | 12,010,119 | 135,020 | *—135,020* | 12,010,119 |

## NORTH-WEST PROVINCES AND OUDH.

North-West Provinces and Oudh.

| NET REVENUE. | 1891-92. | | | | 1892-93. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | TOTAL. | Imperial. | Provincial. | Local. | TOTAL. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue | 4,570,596 | 913,075 | —314,275 | 5,169,396 | 4,621,539 | 870,997 | —314,330 | 5,178,206 |
| Stamps | 169,612 | 508,836 | — | 678,448 | 175,362 | 526,085 | — | 701,447 |
| Excise | 382,577 | 127,526 | — | 510,103 | 400,571 | 133,523 | — | 534,094 |
| Provincial Rates | — | 173,395 | 764,177 | 937,572 | — | 173,088 | 764,809 | 937,897 |
| Assessed Taxes | 115,871 | 110,052 | — | 225,923 | 117,962 | 111,870 | — | 229,832 |
| Forest | 38,963 | 38,964 | — | 77,927 | 36,507 | 36,507 | — | 73,014 |
| Other Heads | 35,805 | —24,791 | —960 | 10,054 | 37,162 | —25,856 | —1,392 | 9,914 |
| TOTAL | 5,313,424 | 1,847,057 | 448,942 | 7,609,423 | 5,389,103 | 1,826,214 | 449,087 | 7,664,404 |
| NET EXPENDITURE: | | | | | | | | |
| Interest | — | — | — | — | 73,835 | 3,820 | —1,909 | 75,746 |
| General Administration | 20,370 | 125,090 | 7,383 | 152,843 | 22,551 | 127,801 | 7,433 | 157,785 |
| Law and Justice | — | 505,750 | — | 505,750 | — | 507,463 | — | 507,463 |
| Police | 3,141 | 353,352 | 253,869 | 610,362 | — | 375,968 | 256,044 | 632,012 |
| Education | — | 35,454 | 124,358 | 159,812 | — | 38,493 | 129,426 | 167,919 |
| Medical | — | 61,982 | 37,188 | 99,170 | — | 66,772 | 39,069 | 105,841 |
| Scientific and other Minor Departments. | 37,183 | 12,467 | 258 | 49,908 | 3,264 | 9,797 | 1,384 | 14,445 |
| Territorial and Political Pensions | 80,295 | — | — | 80,295 | 106,604 | — | — | 106,604 |
| Civil Superannuation | —12,896 | 167,657 | 1,148 | 155,909 | —11,831 | 175,562 | 1,465 | 165,196 |
| Stationery and Printing | —718 | 45,894 | 122 | 45,298 | —936 | 56,204 | 131 | 55,399 |
| Railway Revenue Account | —648,415 | —20,494 | — | —668,909 | —630,756 | 4,044 | — | —626,712 |
| Irrigation | —114,602 | —49,206 | — | —163,808 | —115,907 | —14,898 | — | —130,805 |
| Buildings and Roads | 15,456 | 358,345 | 257,558 | 631,359 | 15,198 | 257,667 | 235,089 | 507,954 |
| Other Heads | 45,334 | —8,143 | 4,187 | 41,378 | 42,064 | —15,250 | 7,104 | 33,918 |
| Provincial and Local Balances | — | —4,399 | 26,179 | 21,780 | — | —16,752 | 23,374 | 6,622 |
| TOTAL | —574,852 | 1,583,749 | 712,250 | 1,721,147 | —495,914 | 1,576,691 | 698,610 | 1,779,387 |
| Surplus | 5,888,276 | 263,308 | —263,308 | 5,888,276 | 5,885,017 | 249,523 | —249,523 | 5,885,017 |

## PUNJAB.

| NET REVENUE. | 1891-92. | | | | 1892-93. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | TOTAL. | Imperial. | Provincial. | Local. | TOTAL. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue | 1,261,101 | 791,799 | *—118,634* | 1,934,266 | 1,402,426 | 682,755 | *—116,819* | 1,968,362 |
| Stamps | 196,047 | 196,047 | — | 392,094 | 97,705 | 293,115 | — | 390,820 |
| Excise | 89,420 | 89,420 | — | 178,840 | 132,892 | 44,297 | — | 177,189 |
| Provincial Rates | — | 56,378 | 342,014 | 398,392 | — | 58,282 | 350,150 | 408,432 |
| Assessed Taxes | 72,226 | 59,854 | — | 132,080 | 73,516 | 60,326 | — | 133,842 |
| Other Heads | 33,683 | 20,212 | *—115* | 53,780 | 29,330 | 13,957 | *—381* | 42,906 |
| TOTAL | 1,652,477 | 1,213,710 | 233,265 | 3,089,452 | 1,735,869 | 1,152,732 | 232,950 | 3,121,551 |
| NET EXPENDITURE: | | | | | | | | |
| General Administration | 17,543 | 96,080 | 12,492 | 126,115 | 19,322 | 98,688 | 12,896 | 130,906 |
| Law and Justice | — | 323,149 | 28 | 323,177 | — | 336,023 | 45 | 336,068 |
| Police | 24,609 | 273,871 | *—3,653* | 294,827 | — | 320,181 | *—4,012* | 316,169 |
| Education | — | 78,322 | 51,300 | 129,622 | — | 75,882 | 53,731 | 129,573 |
| Medical | — | 51,180 | 28,763 | 79,943 | — | 56,386 | 31,670 | 88,056 |
| Political | 120,274 | — | — | 120,274 | 127,408 | — | — | 127,408 |
| Territorial and Political Pensions | 36,094 | — | — | 36,094 | 35,196 | — | — | 35,196 |
| Civil Superannuation | *—6,959* | 79,841 | 451 | 73,333 | *—6,424* | 79,205 | 548 | 73,329 |
| Stationery and Printing | *—2,442* | 41,526 | 2,024 | 41,108 | *—2,390* | 37,054 | 2,029 | 36,693 |
| Railway Revenue Account | *—1,308,269* | 8,631 | — | *—1,299,638* | *—730,713* | — | — | *—730,713* |
| Irrigation | *—356,098* | 15,393 | *—2,357* | *—343,062* | *—406,858* | 23,515 | *—1,048* | *—384,421* |
| Buildings and Roads | 43,541 | 290,533 | 92,258 | 426,332 | 49,944 | 273,118 | 87,622 | 410,684 |
| Other Heads | 46,281 | 296 | 7,357 | 53,934 | 33,480 | 1,803 | 8,220 | 43,503 |
| Provincial and Local Balances | — | *—1,719* | *—8,791* | *—10,510* | — | *—106,050* | *—1,784* | *—107,834* |
| TOTAL | *1,385,426* | 1,257,103 | 179,872 | 51,549 | *—881,065* | 1,195,775 | 189,907 | 504,617 |
| Surplus | 3,037,903 | *—43,393* | 43,393 | 3,037,903 | 2,616,934 | *—43,043* | 43,043 | 2,616,934 |

## BURMA.



| NET REVENUE. | 1891–92. | | | | 1892–93. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | TOTAL. | Imperial. | Provincial. | Local. | TOTAL. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue | 1,044,827 | 690,160 | 1,385 | 1,736,372 | 1,242,050 | 584,015 | 1,641 | 1,827,706 |
| Salt | 160,953 | *—1,016* | — | 159,937 | 161,559 | — | — | 161,559 |
| Stamps | 76,406 | 52,395 | — | 128,801 | 59,124 | 92,400 | — | 151,524 |
| Excise | 326,367 | 93,300 | — | 419,667 | 364,933 | 103,728 | — | 468,661 |
| Provincial Rates | — | — | 93,543 | 93,543 | — | — | 97,427 | 97,427 |
| Customs | 691,365 | *—14,389* | — | 676,976 | 597,408 | *—14,573* | — | 582,835 |
| Assessed Taxes | 43,042 | 28,693 | — | 71,735 | 45,029 | 29,739 | — | 74,768 |
| Forest | 175,062 | 76,658 | — | 251,720 | 274,645 | 111,073 | — | 385,718 |
| Other Heads | 53,382 | *—1,045* | *—35* | 52,302 | 73,375 | *—306* | *—46* | 73,023 |
| TOTAL | 2,571,404 | 924,756 | 94,893 | 3,591,053 | 2,818,123 | 906,076 | 99,022 | 3,823,221 |
| NET EXPENDITURE: | | | | | | | | |
| General Administration | 37,487 | 63,997 | 2,037 | 103,521 | 40,621 | 66,068 | 2,214 | 108,903 |
| Law and Justice | 90,187 | 138,989 | — | 229,176 | 94,443 | 136,715 | — | 231,158 |
| Police | 668,978 | 259,008 | 9,899 | 937,885 | 638,956 | 266,892 | 2,039 | 907,887 |
| Marine | 30,295 | *—1,292* | 3,582 | 32,585 | 42,096 | 3,722 | 2,066 | 47,884 |
| Education | 8,690 | 28,917 | 12,884 | 50,491 | 9,925 | 29,788 | 13,143 | 52,856 |
| Medical | 16,014 | 18,120 | 3,470 | 37,604 | 17,433 | 19,901 | 4,420 | 41,754 |
| Political | 36,144 | 13 | — | 36,157 | 35,016 | 28 | — | 35,044 |
| Stationery and Printing | 77 | 37,619 | — | 37,696 | *—2,159* | 45,330 | — | 43,171 |
| Railway Revenue Account | *—99,874* | *—62,492* | — | *—162,366* | 25,539 | *—116,444* | — | *—90,905* |
| Irrigation | 100,836 | 90,398 | 646 | 191,880 | 112,317 | 67,433 | 1,171 | 180,921 |
| Buildings and Roads | 478,683 | 264,736 | 38,120 | 781,539 | 407,695 | 287,416 | 55,533 | 750,644 |
| Other Heads | 33,789 | 33,654 | *—11,768* | 55,675 | 29,152 | 36,641 | *—15,057* | 50,736 |
| Provincial and Local Balances | — | 50,598 | 38,514 | 89,112 | — | 66,642 | 29,437 | 96,079 |
| TOTAL | 1,401,306 | 922,265 | 97,384 | 2,420,955 | 1,451,034 | 910,132 | 94,966 | 2,456,132 |
| Surplus | 1,170,098 | 2,491 | *—2,491* | 1,170,098 | 1,367,089 | *—4,056* | 4,056 | 1,367,089 |

FINANCE.

Central Provinces.

## CENTRAL PROVINCES.

| NET REVENUE. | 1891-92. | | | | 1892-93. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | TOTAL. | Imperial. | Provincial. | Local. | TOTAL. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue | 277,098 | 306,639 | *—41,276* | 542,461 | 300,778 | 274,169 | *—43,405* | 531,542 |
| Stamps | 41,373 | 124,118 | — | 165,491 | 40,729 | 122,186 | — | 162,915 |
| Excise | 204,109 | 68,037 | — | 272,146 | 203,533 | 67,844 | — | 271,377 |
| Provincial Rates | — | 21,243 | 78,756 | 99,999 | — | 22,308 | 77,189 | 99,497 |
| Assessed Taxes | 23,282 | 22,155 | — | 45,437 | 25,604 | 24,505 | — | 50,109 |
| Forest | 27,838 | 27,839 | — | 55,677 | 18,996 | 18,995 | — | 37,991 |
| Other Heads | 43,352 | 1,371 | *—7* | 44,716 | 45,879 | 1,650 | *—45* | 47,484 |
| TOTAL | 617,052 | 571,402 | 37,473 | 1,225,927 | 635,519 | 531,657 | 33,739 | 1,200,915 |
| NET EXPENDITURE: | | | | | | | | |
| General Administration | 6,064 | 36,865 | 2,756 | 45,685 | 7,355 | 41,767 | 2,784 | 51,906 |
| Law and Justice | — | 89,467 | — | 89,467 | — | 95,024 | — | 95,024 |
| Police | 289 | 126,915 | *—11,106* | 116,098 | — | 135,521 | *—11,635* | 123,886 |
| Education | — | 30,137 | 19,722 | 49,859 | — | 26,559 | 23,739 | 50,298 |
| Medical | — | 26,109 | 4,022 | 30,131 | — | 29,394 | 5,339 | 34,733 |
| Territorial and Political Pensions | 26,939 | — | — | 26,939 | 26,217 | — | — | 26,217 |
| Railway Revenue Account | *—319,585* | — | — | *—319,585* | *—266,202* | — | — | *—266,202* |
| Buildings and Roads | 4,588 | 192,641 | 25,235 | 222,464 | 2,489 | 169,028 | 24,120 | 195,637 |
| Other Heads | 8,882 | 44,890 | *—3,996* | 49,776 | 2,516 | 47,586 | *—2,377* | 47,725 |
| Provincial and Local Balances | — | 17,540 | 7,678 | 25,218 | — | *—21,798* | 345 | *—21,453* |
| TOTAL | *—272,823* | 564,564 | 44,311 | 336,052 | *—227,625* | 523,081 | 42,315 | 337,771 |
| Surplus | 889,875 | 6,838 | *—6,838* | 889,875 | 863,144 | 8,576 | *—8,576* | 863,144 |

Assam.

## ASSAM.

| NET REVENUE. | 1891-92. | | | | 1892-93. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | TOTAL. | Imperial. | Provincial. | Local. | TOTAL. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue | 91,465 | 280,700 | — | 372,165 | 112,700 | 267,084 | — | 379,784 |
| Opium | 39,719 | — | — | 39,719 | 38,677 | — | — | 38,677 |
| Stamps | 19,734 | 59,201 | — | 78,935 | 19,477 | 58,433 | — | 77,910 |
| Excise | 194,647 | 64,882 | — | 259,529 | 193,094 | 64,365 | — | 257,459 |
| Provincial Rates | — | — | 54,488 | 54,488 | — | — | 54,720 | 54,720 |
| Other Heads | 2,851 | 14,508 | *—30* | 27,329 | 18,415 | 17,202 | *—17* | 35,600 |
| TOTAL | 358,416 | 419,291 | 54,458 | 832,165 | 382,363 | 407,084 | 54,703 | 844,150 |
| NET EXPENDITURE: | | | | | | | | |
| General Administration | 4,755 | 19,099 | 259 | 24,113 | 5,078 | 24,538 | 280 | 29,896 |
| Law and Justice | — | 48,372 | — | 48,372 | — | 47,676 | — | 47,676 |
| Police | — | 117,038 | *—5,345* | 111,693 | — | 110,052 | *—5,468* | 104,584 |
| Education | — | 13,391 | 16,106 | 29,497 | — | 13,367 | 16,465 | 29,832 |
| Medical | — | 18,295 | 7,394 | 25,689 | — | 19,320 | 8,250 | 27,570 |
| Railway Revenue Account | — | 9,715 | — | 9,715 | *—79,436* | 8,799 | — | *—70,637* |
| Buildings and Roads | 42,011 | 100,860 | 41,461 | 184,332 | 86,648 | 126,879 | 50,909 | 264,436 |
| Other Heads | 21,790 | 42,353 | 2,224 | 66,367 | *—5,119* | 53,715 | 2,255 | 50,851 |
| Provincial and Local Balances | — | 31,185 | 11,342 | 42,527 | — | 9,336 | *—24,586* | *—15,250* |
| TOTAL | 68,556 | 400,308 | 73,441 | 542,305 | 7,171 | 413,682 | 48,105 | 468,958 |
| Surplus | 289,860 | 18,983 | *—18,983* | 289,860 | 375,192 | *—6,598* | 6,598 | 375,192 |

INDIA GENERAL, *i.e.*, the Departments and Districts not administered directly by the Lieutenant Governors and Chief Commissioners of the Provinces previously enumerated.

| NET REVENUE. | 1891-92. | | | | 1892-93. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | TOTAL. | Imperial. | Provincial. | Local. | TOTAL. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue | 93,013 | — | *— 3,026* | 89,987 | 91,117 | — | *— 3,053* | 88,064 |
| Salt | 1,855,451 | — | — | 1,855,451 | 2,017,810 | — | — | 2,017,810 |
| Stamps | 83,637 | — | — | 83,637 | 123,725 | — | — | 123,725 |
| Excise | 91,134 | — | 644 | 91,778 | 100,323 | — | 711 | 101,034 |
| Assessed Taxes | 151,842 | — | — | 151,842 | 148,242 | — | — | 148,242 |
| Tributes from Native States | 218,985 | — | — | 218,985 | 219,271 | — | — | 219,271 |
| Assignments and Compensations | *— 313,047* | — | — | *— 313,047* | *— 302,436* | — | — | *— 302,436* |
| Other Heads | 2,387 | — | 6,292 | 8,679 | 2,411 | — | 6,852 | 9,263 |
| TOTAL | 2,183,402 | — | 3,910 | 2,187,312 | 2,400,463 | — | 4,510 | 2,404,973 |
| NET EXPENDITURE: | | | | | | | | |
| Interest | 57,524 | — | *— 28* | 57,496 | *— 99,105* | — | *— 28* | *— 99,133* |
| Post Office | *— 196,559* | — | 73 | *— 196,486* | *— 230,244* | — | 73 | *— 230,171* |
| Telegraph | *— 289,375* | — | — | *— 289,375* | *— 275,279* | — | — | *— 275,279* |
| Mint | *— 79,794* | — | — | *— 79,794* | *— 56,144* | — | — | *— 56,144* |
| General Administration | 427,328 | — | 129 | 427,457 | 422,372 | — | 133 | 422,505 |
| Law and Justice | 109,049 | — | 13 | 109,062 | 116,659 | — | *— 48* | 116,611 |
| Police | 48,801 | — | 370 | 49,171 | 55,138 | — | 135 | 55,273 |
| Marine | 158,000 | — | — | 158,000 | 166,722 | — | — | 166,722 |
| Political | 440,788 | — | 28 | 440,816 | 489,528 | — | 24 | 489,552 |
| Scientific and other Minor Departments. | 196,156 | — | 175 | 196,331 | 202,172 | — | 90 | 202,262 |
| Stationery and Printing | *— 150,015* | — | 52 | *— 149,963* | *— 142,964* | — | 12 | *— 142,952* |
| Famine Relief and Insurance | 688,303 | — | — | 688,303 | 17,174 | — | — | 17,174 |
| Railway Revenue Account | *— 4,698,257* | — | — | *— 4,698,257* | *— 4,256,931* | — | — | *— 4,256,931* |
| Irrigation | 623,910 | — | — | 623,910 | 648,691 | — | — | 648,691 |
| Buildings and Roads | 1,157,558 | — | 2,067 | 1,159,625 | 1,060,259 | — | 2,616 | 1,062,875 |
| Army | 8,883,760 | — | — | 8,883,760 | 8,563,691 | — | — | 8,563,691 |
| Special Defence Works | 304,710 | — | — | 304,710 | 255,723 | — | — | 255,723 |
| Other Heads | 41,136 | — | 1,073 | 42,209 | 50,495 | — | 954 | 51,449 |
| Local Balances | — | — | *— 42* | *— 42* | — | — | 549 | 549 |
| TOTAL | 7,723,023 | — | 3,910 | 7,726,933 | 6,987,957 | — | 4,510 | 6,992,467 |
| Surplus | *— 5,539,621* | — | — | *— 5,539,621* | *— 4,587,494* | — | — | *— 4,587,494* |

FINANCE.

Madras.

## MADRAS.

| NET REVENUE. | 1891-92. | | | | 1892-93. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | TOTAL. | Imperial. | Provincial. | Local. | TOTAL. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue | 2,354,780 | 1,008,077 | —313,369 | 3,049,488 | 2,949,768 | 1,085,744 | —309,684 | 3,725,828 |
| Salt | 1,578,744 | 3,474 | — | 1,582,218 | 1,563,884 | —34,450 | — | 1,529,434 |
| Stamps | 164,421 | 493,262 | — | 657,683 | 176,162 | 528,489 | — | 704,651 |
| Excise | 868,413 | 289,471 | — | 1,157,884 | 865,300 | 288,432 | — | 1,153,732 |
| Provincial Rates | — | — | 749,259 | 749,259 | — | — | 912,670 | 912,670 |
| Customs | 160,457 | —12,307 | — | 148,150 | 160,958 | —11,349 | — | 149,609 |
| Assessed Taxes | 103,320 | 85,995 | — | 189,315 | 109,311 | 91,792 | — | 201,103 |
| Tributes from Native States | 344,943 | — | — | 344,943 | 344,952 | — | — | 344,952 |
| Assignments and Compensations | —121,914 | — | — | —121,914 | —116,362 | — | — | —116,362 |
| Other Heads | 3,765 | 51,294 | —2,747 | 52,312 | 21,298 | 29,128 | —2,757 | 47,669 |
| TOTAL | 5,456,929 | 1,919,266 | 433,143 | 7,809,338 | 6,075,271 | 1,977,786 | 600,229 | 8,653,286 |
| NET EXPENDITURE: | | | | | | | | |
| General Administration | 27,577 | 100,682 | 27,531 | 155,790 | 26,855 | 100,151 | 28,524 | 155,530 |
| Law and Justice | — | 436,590 | — | 436,590 | — | 449,456 | — | 449,456 |
| Police | 1,542 | 373,327 | — | 374,869 | — | 375,751 | — | 375,751 |
| Education | — | 132,071 | 84,036 | 216,107 | — | 140,659 | 84,005 | 224,664 |
| Medical | — | 107,695 | 128,443 | 236,138 | — | 113,666 | 124,015 | 237,681 |
| Scientific and other Minor Departments. | 35,169 | 16,145 | — | 51,314 | 4,458 | 18,320 | — | 22,778 |
| Territorial and Political Pensions. | 83,991 | — | — | 83,991 | 79,983 | — | — | 79,983 |
| Civil Superannuation | —13,352 | 128,399 | 547 | 115,594 | —10,653 | 132,613 | 1,100 | 123,060 |
| Stationery and Printing | 16,609 | 66,193 | — | 82,802 | 24,736 | 64,075 | — | 88,811 |
| Famine Relief | — | 15,663 | — | 15,663 | — | 24,426 | — | 24,426 |
| Construction of Protective Works. | 546,364 | — | — | 546,364 | 1,029,043 | — | — | 1,029,043 |
| Construction of Railways (charged to Revenue, in addition to that under Protective Works). | — | 42,662 | — | 42,662 | 201,225 | 91,902 | — | 293,127 |
| Railway Revenue Account | —276,929 | 3,610 | — | —273,319 | —341,435 | — | — | —341,435 |
| Irrigation | —382,837 | 383,836 | 2,344 | 3,343 | —414,496 | 317,148 | 1,888 | —95,465 |
| Buildings and Roads | 11,579 | 297,601 | 351,219 | 660,399 | 13,053 | 240,249 | 368,717 | 622,019 |
| Army | 3,423,040 | — | — | 3,423,040 | 3,386,182 | — | — | 3,386,182 |
| Other Heads | 7,794 | 34,040 | —39,353 | 2,481 | 8,320 | 32,973 | —39,339 | 1,954 |
| Provincial and Local Balances | — | —241,770 | —99,102 | —340,872 | — | —159,081 | 66,802 | —92,279 |
| TOTAL | 3,480,547 | 1,896,744 | 455,665 | 5,832,956 | 4,007,271 | 1,942,303 | 635,712 | 6,585,286 |
| Surplus | 1,976,382 | 22,522 | —22,522 | 1,976,382 | 2,068,000 | 35,483 | —35,483 | 2,068,000 |

## BOMBAY.

Bombay.

| NET REVENUE. | 1891-92. | | | | 1892-93. | | | |
|---|---|---|---|---|---|---|---|---|
| | Imperial. | Provincial. | Local. | TOTAL. | Imperial. | Provincial. | Local. | TOTAL. |
| | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. | Rx. |
| Land Revenue | 1,707,460 | 2,083,773 | —10,210 | 3,781,023 | 1,880,040 | 2,007,706 | —10,103 | 3,877,643 |
| Opium | 1,841,618 | — | — | 1,841,618 | 1,673,055 | — | — | 1,673,055 |
| Salt | 2,175,625 | 5,667 | — | 2,181,292 | 2,086,360 | 5,708 | — | 2,092,068 |
| Stamps | 130,667 | 392,001 | — | 522,668 | 137,338 | 412,012 | — | 549,350 |
| Excise | 742,849 | 247,616 | — | 990,465 | 744,069 | 248,023 | — | 992,092 |
| Provincial Rates | — | — | 299,093 | 299,093 | — | — | 296,651 | 296,651 |
| Customs | 276,872 | 3,967 | — | 280,839 | 288,899 | 4,307 | — | 293,206 |
| Assessed Taxes | 196,758 | 167,731 | — | 364,489 | 208,892 | 174,211 | — | 383,103 |
| Forest | 67,876 | 67,875 | — | 135,751 | 68,564 | 68,564 | — | 137,128 |
| Tributes from Native States | 126,629 | — | — | 126,629 | 128,549 | — | — | 128,549 |
| Other Heads | —40,056 | —6,820 | —645 | —47,521 | —57,998 | —6,950 | —1,665 | —66,611 |
| Assignments and Compensations | —85,344 | —918,752 | — | —1,004,096 | —58,255 | —997,375 | — | —1,055,630 |
| TOTAL | 7,140,954 | 2,043,058 | 288,238 | 9,472,250 | 7,094,515 | 1,916,206 | 284,883 | 9,300,604 |
| NET EXPENDITURE: | | | | | | | | |
| Interest | —145,860 | —5,344 | 426 | —150,778 | —142,604 | —5,442 | 324 | —147,722 |
| Mint | —49,443 | — | — | —49,443 | —158,498 | — | — | —158,498 |
| General Administration | 38,511 | 136,228 | 4,750 | 179,489 | 40,938 | 136,779 | 4,649 | 182,366 |
| Law and Justice | — | 440,475 | — | 440,475 | — | 438,693 | — | 438,693 |
| Police | 3,814 | 493,568 | —7,844 | 479,538 | — | 461,779 | —18,404 | 443,375 |
| Education | — | 135,581 | 122,614 | 258,195 | — | 135,511 | 122,789 | 258,300 |
| Medical | — | 121,441 | 16,081 | 137,522 | — | 130,273 | 18,170 | 148,443 |
| Political | 55,240 | 32,526 | — | 87,766 | 62,352 | 32,882 | — | 95,234 |
| Territorial and Political Pensions | 76,204 | — | — | 76,204 | 82,890 | — | — | 82,890 |
| Civil Superannuation | —14,084 | 131,716 | 246 | 117,878 | —8,752 | 137,333 | 34 | 128,615 |
| Stationery and Printing | 23,966 | 51,746 | 1,394 | 77,106 | 22,714 | 63,897 | 321 | 86,932 |
| Construction of Provincial Railways. | — | 117,221 | — | 117,221 | — | 42,181 | — | 42,181 |
| Railway Revenue Account | —135,290 | —92 | — | —135,382 | —148,763 | 12 | — | —148,751 |
| Irrigation | 79,067 | 2,121 | — | 81,188 | 57,518 | —760 | — | 56,758 |
| Buildings and Roads | 47,790 | 323,064 | 203,464 | 574,318 | 42,050 | 271,478 | 212,671 | 526,199 |
| Army | 2,714,839 | — | — | 2,714,839 | 2,849,175 | — | — | 2,849,175 |
| Other Heads | 12,783 | 54,624 | —1,081 | 66,326 | 22,824 | 38,518 | 9,980 | 71,322 |
| Provincial and Local Balances | — | —53,189 | 19,560 | —33,629 | — | —23,888 | —8,691 | —32,579 |
| TOTAL | 2,707,537 | 1,981,686 | 349,610 | 5,038,833 | 2,721,844 | 1,859,246 | 341,843 | 4,922,933 |
| Surplus | 4,433,417 | 61,372 | —61,372 | 4,433,417 | 4,377,671 | 56,960 | —56,960 | 4,377,671 |

## NET EXPENDITURE in *England*, with the EXCHANGE thereon.

| NET EXPENDITURE. | 1891-92. | | | 1892-93. | | |
|---|---|---|---|---|---|---|
| | Sterling. | Exchange. | TOTAL. | Sterling. | Exchange. | TOTAL. |
| | £. | Rx. | Rx. | £. | Rx. | Rx. |
| Stamps purchased for India | 34,105 | 14,811 | 48,916 | 31,277 | 18,817 | 50,094 |
| Interest | 2,580,879 | 1,120,780 | 3,701,659 | 2,409,174 | 1,449,420 | 3,858,594 |
| Post Office | 96,321 | 41,829 | 138,150 | 95,658 | 57,550 | 153,208 |
| Telegraph | 145,573 | 63,217 | 208,790 | 132,746 | 79,863 | 212,609 |
| General Administration | 249,532 | 108,362 | 357,894 | 255,545 | 153,742 | 409,287 |
| Marine | 133,447 | 57,951 | 191,398 | 290,476 | 174,758 | 465,234 |
| Political | 25,806 | 11,207 | 37,013 | 22,327 | 13,432 | 35,759 |
| Scientific and other minor Departments | 29,387 | 12,761 | 42,148 | 43,613 | 26,239 | 69,852 |
| Territorial and Political Pensions | 54,223 | 23,547 | 77,770 | 29,218 | 17,578 | 46,796 |
| Civil Furlough Allowances | 192,228 | 83,477 | 275,705 | 207,826 | 125,033 | 332,859 |
| Superannuation | 1,625,441 | 705,868 | 2,331,309 | 1,709,546 | 1,028,506 | 2,738,052 |
| Stationery and Printing | 41,098 | 17,847 | 58,945 | 52,868 | 31,807 | 84,675 |
| Railway Revenue Account | 5,651,951 | 2,454,430 | 8,106,381 | 5,723,260 | 3,443,258 | 9,166,518 |
| Buildings and Roads | 82,288 | 35,736 | 118,024 | 98,864 | 59,480 | 158,344 |
| Army: Effective | 2,375,232 | 1,031,474 | 3,406,706 | 2,462,689 | 1,481,617 | 3,944,306 |
| „ Non-effective | 2,141,764 | 930,088 | 3,071,852 | 2,379,731 | 1,431,706 | 3,811,437 |
| Special Defence Works | 209,263 | 90,875 | 300,138 | 126,332 | 76,005 | 202,337 |
| Other Heads | 48,242 | 20,949 | 69,191 | 43,158 | 25,965 | 69,123 |
| TOTAL | 15,716,780 | 6,825,209 | 22,541,989 | 16,114,308 | 9,694,776 | 25,809,084 |

## SUMMARY.

| PROVINCES, &c. | 1891-92. | | 1892-93. | |
|---|---|---|---|---|
| | Surplus. | Deficit. | Surplus. | Deficit. |
| | Rx. | Rx. | Rx. | Rx. |
| BENGAL | 10,863,334 | | 12,010,119 | |
| NORTH-WEST PROVINCES and OUDH | 5,888,276 | | 5,885,017 | |
| PUNJAB | 3,037,903 | | 2,616,934 | |
| BURMA | 1,170,098 | | 1,367,089 | |
| CENTRAL PROVINCES | 889,875 | | 863,144 | |
| ASSAM | 289,860 | | 375,192 | |
| INDIA GENERAL | — | 5,539,621 | — | 4,587,494 |
| MADRAS | 1,976,382 | | 2,068,000 | |
| BOMBAY | 4,433,417 | | 4,377,671 | |
| ENGLAND and EXCHANGE | — | 22,541,989 | — | 25,809,084 |
| TOTAL | 467,535 | | | 833,412 |

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